

# **CALIFORNIAN KINSHIP TERMINOLOGIES**

**BY**

**EDWARD WINSLOW GIFFORD**

**UNIVERSITY OF CALIFORNIA PUBLICATIONS IN AMERICAN ARCHAEOLOGY  
AND ETHNOLOGY. Vol. 18, pp. 1-285, with 29 maps**

**UNIVERSITY OF CALIFORNIA PRESS  
BERKELEY, CALIFORNIA**

**1922**

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Issued December 22, 1922



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## INTRODUCTION

My interest in kinship was first aroused by the controversial writings of Dr. A. L. Kroeber<sup>1</sup> and Dr. W. H. R. Rivers;<sup>2</sup> the first kinship system which I obtained and published was that of the Central Miwok.<sup>3</sup> This was followed by the Tübatulabal and Kawaiisu systems.<sup>4</sup> I was encouraged then by Dr. Kroeber to attempt a kinship survey of the entire state of California and forthwith set about gathering the materials which are presented in this volume.

It is hoped that the presentation of this large series of systems, from varied tribes occupying a relatively small and compact area, may

<sup>1</sup> Classificatory Systems of Relationship, Jour. Royal Anthr. Inst., xxxix, 77-84, 1909.

<sup>2</sup> Kinship and Social Organisation (London, Constable & Co., Ltd., 1914).

<sup>3</sup> Miwok Moieties, present series, xii, 170-193, 1916.

<sup>4</sup> Tübatulabal and Kawaiisu Kinship Terms, present series, xii, 219-248, 1917.

throw some light on the factors which shape kinship terminologies, and especially upon the distribution and diffusion of kinship traits. In view of the remarkable linguistic diversity within the state, I feel that I could not have chosen a finer field than California for this investigation. This linguistic diversity is paralleled in the kinship systems, no two of which are exactly alike. Furthermore, the cultural settings are varied, being strictly Californian in the central portion of the state, but allied to North Pacific coast culture in the north and to South-western culture in the south.

In the treatment of materials I have separated the individual kinship systems from the analysis and discussion of kinship traits. Consequently the first half of the volume is devoted to a presentation of the individual kinship systems, the second half to a comparative analysis. This method makes the systems readily available to investigators who desire to use them for comparative purposes and frees the discussion from burdensome details.

As no two Californian kinship systems are absolutely identical, the comparison of whole kinship systems would be futile. Therefore in the second half of the paper I examine the methods of classifying various groups of relatives throughout the state, plotting the results on accompanying maps, which aid materially in visualizing the distribution of various modes of classification. Moreover, these maps make apparent the fact that kinship traits are diffused much as are other cultural traits. It is not whole kinship systems that are borrowed, but only individual traits or groups of traits.

A chapter is devoted to measuring the amount of the conceptual interrelations of fifty Californian kinship systems, the ground common to each two systems being expressed by a percentage. By this means the degree of specialization or generalization of the various systems is readily made manifest; also the direction in which influences have traveled (see map 25).

In order to attack the problem from every angle, I have attempted a linguistic analysis, as well as a conceptual one, and have tried to isolate roots with the idea of determining how far linguistic relationship has played a hand against diffusion. The results seem to indicate a common linguistic foundation of considerable extent for the kinship systems of the seven linguistic families found within the state.

Social factors are considered, but observation of the varying effects of different usages (the levirate, for example) makes it only too apparent that it is impossible to predict the exact result of a given custom

upon a kinship system. Group exogamy, which is present in central and southern California, seems to fail signally as a determining factor in Californian kinship systems. It becomes clear that to attain a certain result (say, for instance, the use of parent terms for certain uncles and aunts) the custom (sibling-in-law marriage) required to bring this about must have as a complement the proper kinship complex, otherwise the required custom will not produce the result.

Lastly, under the heading "Psychology" are presented those aspects of kinship nomenclature which do not readily fall under the head of language, society, or diffusion, yet which are intimately connected, nevertheless, with all of these. The underlying categories of kinship are examined and their distributions noted. These distributions are related, of course, to the distributions of various types of nomenclature. Bifurcation and sex asymmetry in kinship terms are studied, but the results show no clear association with group organization on the one hand or with patrilinear or matrilinear descent on the other hand. Likewise reciprocity, both conceptual and verbal, fails to link with any special form of social organization.

The upshot of my labors has been to make it apparent that there is no one set of factors, linguistic, psychic, or social, which will account for all of the features of kinship systems. All of these sets of factors enter into all systems, but in varying combinations, resulting in a bewildering mass of kinship patterns, each differing in some degree from all of its fellows.

The greater part of the field work was financed from the budget of the University of California. The New York Academy of Sciences, however, through Dr. Robert H. Lowie, made a grant to the author by means of which the following kinship systems were secured: Lutuami, Shasta, Karok, Kamia, Southern Diegueño, and Northern Diegueño.

Acknowledgments are due Messrs. P. E. Goddard, A. L. Kroeber, R. H. Lowie, J. Alden Mason, W. E. Myers, Paul Radin, Edward Sapir, Leslie Spier, and T. T. Waterman for the use of unpublished materials, and to Drs. Kroeber, Sapir, and Goddard especially for their kindly criticisms of portions of the paper.

I am also indebted to the Bureau of American Ethnology for permission to publish certain Chumash and Costanoan lists of terms collected by Mr. H. W. Henshaw, to wit: Obispeño, Barbareño, Island Chumash, and Santa Cruz Costanoan.

It is necessary to call attention to certain terms used in this work. "Tribe" and "group" are used synonymously. Tribe, however, is very inexact, as there are few true tribes in California, the usual political unit being a small community. The use of the term is therefore purely a matter of convenience and does not connote a particular type of political organization.

There is an inconsistency in the present paper which, however, I believe will not detract from its usefulness: Terms are given for some tribes with possessive affixes, for others without.

The literature concerning Californian kinship terminologies is exceedingly scanty and consists in most cases of bare lists. Dr. A. L. Kroeber's "California Kinship Systems"<sup>5</sup> is the first attempt at a systematic survey of the kinship systems of the entire state. Considering the paucity of material which Dr. Kroeber had at hand, it is an indication of his remarkable perspicacity that practically all of his formulations have been substantiated independently by my relatively full data.

#### LINGUISTIC GROUPS

An enumeration of the linguistic groups of California, as represented on the maps in this paper, is given at this point in order that the reader who follows the discussion in detail may readily orient himself.

The minor linguistic groups which occupied the state of California in 1770, when the first Spanish settlements were founded, exceeded one hundred in number. Their distribution as worked out by Dr. A. L. Kroeber is shown in the maps of this paper in which the linguistic groups are numbered.<sup>5a</sup> The key list of linguistic groups follows:

Athabascan Family	1 i. Sinkyone
Oregon group	1 j. Wailaki
1 a. Rogue River (uninhabited)	1 k. Kato
Tolowa group	Algonkin Family
1 b. Tolowa	Yurok
Hupa group	2 a. Yurok
1 c. Hupa	2 b. Coast Yurok
1 d. Chilula	3. Wiyot
1 e. Whilkut	Yukian Family
Mattole group	4 a. Yuki
1 f. Mattole	4 b. Huchnom
Wailaki group	4 c. Coast Yuki
1 g. Nongatl	4 d. Wappo
1 h. Lassik	

<sup>5</sup> Present series, XII, 339-396, 1917.

<sup>5a</sup> This map is published together with the key list in A. L. Kroeber, *Elements of Culture in Native California*, present series, XIII, 259-328, map 1, 1922.



## Lutuamian Family

## 5. Modoc

## Hokan Family

## Shastan

- 6 a. Shasta
- 6 b. New River Shasta
- 6 c. Konomihu
- 6 d. Okwanuchu
- 6 e. Achomawi (Pit River)
- 6 f. Atsugewi (Hat Creek)

## Yana

- 7 a. Northern Yana (Noze)
- 7 b. Central Yana (Noze)
- 7 c. Southern Yana
- 7 d. Yahí

## 8. Karok

## 9. Chimariko

## Pomo

- 10 a. Northern
- 10 b. Central
- 10 c. Eastern
- 10 d. Southeastern
- 10 e. Northeastern
- 10 f. Southern
- 10 g. Southwestern

## 11. Washo

## 12. Esselen

## Salinan

- 13 a. Antoniano
- 13 b. Migueleño
- 13 c. Playano (doubtful)

## Chumash

- 14 a. Obispeño
- 14 b. Purisimeño
- 14 c. Ynezeño
- 14 d. Barbareño
- 14 e. Ventureño
- 14 f. Emigdiano
- 14 g. Interior (doubtful)
- 14 h. Island

## Yuman

- 15 a. Northern Diegueño
- 15 b. Southern Diegueño
- 15 c. Kamia (doubtful)
- 15 d. Yuma
- 15 e. Halchidhoma (now Chemehuevi)
- 15 f. Mohave

## Penutian Family

## Wintun

## Dialect groups:

- 16 a. Northern
- 16 b. Central (Nomlaki)

## 16 c. Southeastern (Patwin)

## 16 d. Southwestern (Patwin)

## Maidu

## Dialect groups:

- 17 a. Northeastern
- 17 b. Northwestern
- 17 c. Southern (Nishinam)

## Miwok

- 18 a. Coast
- 18 b. Lake
- 18 c. Plains
- 18 d. Northern
- 18 e. Central
- 18 f. Southern

## Costanoan

- 19 a. Saklan (doubtful)
- 19 b. San Francisco
- 19 c. Santa Clara
- 19 d. Santa Cruz
- 19 e. San Juan Bautista (Mutsun)
- 19 f. Monterey (Rumsen)
- 19 g. Soledad

## Yokuts

## Dialect groups:

- 20 a. Northern Valley (Chulamni, Chauchila, etc.)
- 20 b. Southern Valley (Tachi, Yauelmani, etc.)
- 20 c. Northern Hill (Chukchansi, etc.)
- 20 d. Kings River (Choinimni, etc.)
- 20 e. Tule-Kaweah (Yaudanchi, etc.)
- 20 f. Poso Creek (Paleuyami)
- 20 g. Buena Vista (Tulamni, etc.)

## Uto-Aztekan (Shoshonean) Family

## Plateau branch

## Mono-Bannock group:

- 21 a. Northern Paiute (Paviotso)
- 21 b. Eastern Mono (Paiute)
- 21 c. Western Mono

## Shoshoni-Comanche group:

- 21 d. Koso (Panamint, Shoshone)

## Ute-Chemehuevi group:

- 21 e. Chemehuevi (Southern Paiute)
- 21 f. Kawaiisu (Tehachapi)

## Kern River branch

- 21 g. Tübatulabal (and Bankalachi)

## Southern California branch

## Serrano group:

- 21 h. Kitanemuk (Tejon)

21 i. Alliklik	Luisseño-Cahuilla group:
21 j. Vanyume (Möhineyam)	21 o. Juaneño
21 k. Serrano	21 p. Luiseño
Gabrielino group:	21 q. Cupeño
21 l. Fernandefio	21 r. Pass Cahuilla
21 m. Gabrielino	21 s. Mountain Cahuilla
21 n. Nicoleño	21 t. Desert Cahuilla

Eighty of these groups are represented in the present paper, but only from some fifty odd groups have fairly complete kinship terminologies been obtained. With a few exceptions, most of the extant groups of the state were visited by me during the years 1915-1918. Notable omissions were the Atsugewi, Northeastern Pomo, Koso, Chemehuevi, and Chumash. Kinship systems for the last two were not recorded, as the data had been secured previously by Mr. John P. Harrington.

#### INFORMANTS

Aside from materials obtained by other workers and generously placed at the disposal of the writer, the bulk of the information presented in the following pages was procured by the writer through interviews with over one hundred and fifty natives. These Californians who have furnished the data so invaluable to the discussion of kinship problems are presented in the following list:

<i>Tribe</i>	<i>Informant</i>	<i>Residence</i>
Hupa	Mary Marshall	Hoopa, Humboldt Co.
Hupa	Matilda Marshall	Hoopa, Humboldt Co.
Hupa	Mrs. David Maston	Hoopa, Humboldt Co.
Whilkut	John Stevens	Korbel, Humboldt Co.
Whilkut	Mrs. Jim Brock	Blue Lake, Humboldt Co.
Whilkut	Rena Maple	Maple Creek, Humboldt Co.
Tolowa	Mrs. Joseph Seymour	Crescent City, Del Norte Co.
Tolowa	Mabel Seymour	Crescent City, Del Norte Co.
Tolowa	Maggie Boles	Crescent City, Del Norte Co.
Tolowa	Delia Nixon	Crescent City, Del Norte Co.
Tolowa	Emma Polastri	Crescent City, Del Norte Co.
Tolowa	Jennie Scott	Crescent City, Del Norte Co.
Tolowa	Ellen Stenshow	Crescent City, Del Norte Co.
Tolowa	Dewey Billie	Crescent City, Del Norte Co.
Lassik	Mary Majors	Round Valley, Mendocino Co.
Wailaki	Lucy Moore	Round Valley, Mendocino Co.
Wailaki	Sally	Round Valley, Mendocino Co.
Wailaki	Mary Major	Round Valley, Mendocino Co.
Sinkyone	Jennie Page	Briceland, Humboldt Co.
Sinkyone	Jack Woodman	Briceland, Humboldt Co.
Kato	Bill Ray	Laytonville, Mendocino Co.
Wiyot	Jim Brock	Blue Lake, Humboldt Co.
Wiyot	Miranda Berry	Beatrice, Humboldt Co.

<i>Tribe</i>	<i>Informant</i>	<i>Residence</i>
Wiyot	William Brainard	Loleta, Humboldt Co.
Wiyot	Maria Rhodes	Maple Creek, Humboldt Co.
Yurok	Mary Marshall	Hoopa, Humboldt Co.
Yurok	Mrs. F. Colegrove	Hoopa, Humboldt Co.
Yurok	David Maston	Hoopa, Humboldt Co.
Karok	Ella Pierce	Yreka, Siskiyou Co.
Shasta	Jane Allen	Yreka, Siskiyou Co.
Shasta	Rose Dixon	Yreka, Siskiyou Co.
Shasta	Mrs. David Law	Yreka, Siskiyou Co.
Shasta	Mary Kearny	Yreka, Siskiyou Co.
Achomawi	Charles Green	Fall River, Shasta Co.
Achomawi	Ima Green	Fall River, Shasta Co.
Achomawi	Mabel Jackson	Klamath Agency, Oregon
Lutuami	Rose Wright	Klamath Agency, Oregon
Lutuami	Lee Snipes	Klamath Agency, Oregon
Lutuami	Charlie Stokes	Klamath Agency, Oregon
Lutuami	George Isaacs	Klamath Agency, Oregon
Northwestern Maidu	Amanda Wilson	Chico, Butte Co.
Northwestern Maidu	Lama Young	Chico, Butte Co.
Northwestern Maidu	Jack Frank	Chico, Butte Co.
Northwestern Maidu	Polly	Mooretown, Butte Co.
Northwestern Maidu	Rose Taylor	Mooretown, Butte Co.
Northwestern Maidu	Louisa Bonn	Mooretown, Butte Co.
Northwestern Maidu	Ella McCauley	Mooretown, Butte Co.
Northwestern Maidu	Henry H. Lee	Belden, Plumas Co.
Northwestern Maidu	Charlie James	Genessee, Plumas Co.
Southern Maidu	Thompson Suehead	Colfax, Placer Co.
Southern Maidu	Susie Wallace	Colfax, Placer Co.
Eastern Mono	Susie Jim	Bridgeport, Mono Co.
Eastern Mono	Dick Reuben	Benton, Mono Co.
Eastern Mono	Mrs. Harry Jones	Bishop, Inyo Co.
Eastern Mono	Annie Oliver	Bishop, Inyo Co.
Eastern Mono	Maggie	Bishop, Inyo Co.
Eastern Mono	Sam Newlin	Bishop, Inyo Co.
Eastern Mono	Fred Shaw	Bishop, Inyo Co.
Western Mono	Annie Maxwell	North Fork, Madera Co.
Western Mono	Mary Burkhead	North Fork, Madera Co.
Western Mono	Polly Sherman	North Fork, Madera Co.
Western Mono	Nellie Lavell	North Fork, Madera Co.
Kawaiisu	Refugia Williams	Loraine, Kern Co.
Kawaiisu	John Nichols	Piute, Kern Co.
Kawaiisu	Mrs. M. Williams	Piute, Kern Co.
Kawaiisu	Mrs. A. Brown	Piute, Kern Co.
Tübatulabal	Bill Chico	Onyx, Kern Co.
Tübatulabal	Tom Pope	Onyx, Kern Co.
Tübatulabal	Petra Miranda	Weldon, Kern Co.
Tübatulabal	Mercedes Linares	Weldon, Kern Co.
Tübatulabal	Clotilda L. Gomez	Weldon, Kern Co.
Tübatulabal	Mrs. John Nicholas	Kernville, Kern Co.
Tübatulabal	Indian Henry	Kernville, Kern Co.
Tübatulabal	Mary Imitirio	Tule River Agency, Tulare Co.
Serrano	Julia Manuel	Patton, San Bernardino Co.

<i>Tribe</i>	<i>Informant</i>	<i>Residence</i>
Serrano	Annie Siva	Patton, San Bernardino Co.
Serrano	Ben Morongo	Banning, Riverside Co.
Serrano	Rose Morongo	Banning, Riverside Co.
Desert Cahuilla	Captain Jim	Coachella, Riverside Co.
Desert Cahuilla	Will Jim	Coachella, Riverside Co.
Desert Cahuilla	Maria Augustine	Coachella, Riverside Co.
Desert Cahuilla	Mrs. John Joseph	Coachella, Riverside Co.
Cupeño	José Miguel	Banning, Riverside Co.
Cupeño	Desiderio Laws	Banning, Riverside Co.
Cupeño	Tomasa Annis	Banning, Riverside Co.
Luiiseño	Francisca Lala	San Jacinto, Riverside Co.
Luiiseño	Canuta	San Jacinto, Riverside Co.
Luiiseño	Philomena Cleveland	San Jacinto, Riverside Co.
Gabrielino	José Varojo	Patton, San Bernardino Co.
Yuma	Patrick Miguel	Yuma Reservation, Imperial Co.
Yuma	Jones Cleveland	Yuma Reservation, Imperial Co.
Yuma	Raphael Cleveland	Yuma Reservation, Imperial Co.
Kamia	Placidus Aspa	Yuma Reservation, Imperial Co.
Cocopa	Joseph Homer	Yuma Reservation, Imperial Co.
Cocopa	Frank Tehana	Somerton, Arizona
Cocopa	Stump Barley	Somerton, Arizona
Southern Diegueño	José Largo Hetmiel	Campo, San Diego Co.
Southern Diegueño	James McCarty Hetmiel	Campo, San Diego Co.
Southern Diegueño	Hutcukal, old woman	Campo, San Diego Co.
Northern Diegueño	Tomaso Curo	Mesa Grande, San Diego Co.
Northern Diegueño	Angel Quilp	Mesa Grande, San Diego Co.
Santa Clara Costanoan	Angela	Pleasanton, Alameda Co.
Paleuyami	Stephen Soto	Tule River Agency, Tulare Co.
Yauelmani	Jim Alto	Tule River Agency, Tulare Co.
Yauelmani	Juan Dionicio	Tule River Agency, Tulare Co.
Yauelmani	José Maria Vera	Tule River Agency, Tulare Co.
Yauelmani	Bob Felis	Tule River Agency, Tulare Co.
Yauelmani	Dick Francisco	Tule River Agency, Tulare Co.
Yauelmani	Francisco Pancho	Tule River Agency, Tulare Co.
Yaudanchi	Bob Felis	Tule River Agency, Tulare Co.
Yaudanchi	Dick Francisco	Tule River Agency, Tulare Co.
Yaudanchi	Jennie Dionicio	Tule River Agency, Tulare Co.
Yandanchi	Francisco Pancho	Tule River Agency, Tulare Co.
Tachi	Mary Fernando	Lemoore, Kings Co.
Tachi	Sam Thomas	Lemoore, Kings Co.
Gashowu	Ellen Murphy	Friant, Fresno Co.
Chukchansi	Chicago Dick	Picayune, Madera Co.
Chukchansi	Mary Jones	Picayune, Madera Co.
Chukchansi	Susie Georgely	Picayune, Madera Co.
Chukchansi	Levi Graham	Oakhurst, Madera Co.
Southern Miwok	Frank Bishop	Oakhurst, Madera Co.
Southern Miwok	Frank Georgely	Picayune, Madera Co.
Central Miwok	Thomas Williams	Jamestown, Tuolumne Co.
Central Miwok	George Anderson	Sonora, Tuolumne Co.
Central Miwok	William Fuller	Soulsbyville, Tuolumne Co.
Central Miwok	Sophia Thompson	Tuolumne, Tuolumne Co.
Central Miwok	Lena Cox	Tuolumne, Tuolumne Co.

<i>Tribe</i>	<i>Informant</i>	<i>Residence</i>
Northern Miwok	Isaac Howdy	Plymouth, Amador Co.
Northern Miwok	Frank Powell	Ione, Amador Co.
Plains Miwok	Trinidad	Pleasanton, Alameda Co.
Lake Miwok	Clifford Salvador	Lower Lake, Lake Co.
Lake Miwok	Carl Sebastian	Middletown, Lake Co.
Lake Miwok	Mrs. Carl Sebastian	Middletown, Lake Co.
Coast Miwok	Carl Sebastian	Middletown, Lake Co.
Coast Miwok	Mrs. William Smith	Bodega Bay, Sonoma Co.
Coast Miwok	Mrs. Buvelot	Sebastopol, Sonoma Co.
Southeastern Wintun	Thomas Odock	Colusa, Colusa Co.
Southeastern Wintun	William Benjamin	Rumsey, Yolo Co.
Southwestern Wintun	John Wright	Rumsey, Yolo Co.
Central Wintun	Dixie Edsall	Round Valley, Mendocino Co.
Central Wintun	James McGettric	Round Valley, Mendocino Co.
Central Wintun	Mrs. Cecil Poe	Round Valley, Mendocino Co.
Northern Wintun	Mary Major	Round Valley, Mendocino Co.
Northern Wintun	Edward Alexander	Redding, Shasta Co.
Northern Wintun	Grant Towndolly	Upper Soda Springs, Siskiyou Co.
Northern Wintun	Charlie Bennett	Antler, Shasta Co.
Northern Wintun	Tom Neil	Antler, Shasta Co.
Southeastern Pomo	Clifford Salvador	Lower Lake, Lake Co.
Eastern Pomo	Raymond Brown	Round Valley, Mendocino Co.
Central Pomo	Nancy McDermitt	Round Valley, Mendocino Co.
Central Pomo	Kate Beatty	Yokaia Rancheria, Mendocino Co.
Central Pomo	Rose James	Yokaia Rancheria, Mendocino Co.
Northern Pomo	Anna Crabtree	Round Valley, Mendocino Co.
Northern Pomo	Minnie Scott	Round Valley, Mendocino Co.
Northern Pomo	Jennie Frank	Round Valley, Mendocino Co.
Southwestern Pomo	Julia Marrufo	Stewart's Point, Sonoma Co.
Southwestern Pomo	Mary Samuels	Stewart's Point, Sonoma Co.
Southwestern Pomo	Celestina Scott	Stewart's Point, Sonoma Co.
Southern Pomo	Clara Felis	Cloverdale, Sonoma Co.
Southern Pomo	Charles Ramon	Cloverdale, Sonoma Co.
Southern Pomo	Henry Maximilian, Sr.	Healdsburg, Sonoma Co.
Southern Pomo	Mamie Brown	Healdsburg, Sonoma Co.
Wappo	Carl Sebastian	Middletown, Lake Co.
Wappo	Frances Tripo	Healdsburg, Sonoma Co.
Wappo	Martha McCloud	Healdsburg, Sonoma Co.
Wappo	Gertrudis Slocum	Healdsburg, Sonoma Co.
Wappo	Andrew Slocum	Healdsburg, Sonoma Co.
Huchnom	Moses Wright	Round Valley, Mendocino Co.
Huchnom	Louisa Hutchins	Round Valley, Mendocino Co.
Huchnom	Lorene Heenan	Round Valley, Mendocino Co.
Yuki	Ralph Moore	Round Valley, Mendocino Co.
Yuki	Ellen Poe	Round Valley, Mendocino Co.
Yuki	David Brown	Round Valley, Mendocino Co.
Yuki	Louisa Hutchins	Round Valley, Mendocino Co.
Yuki	Lorene Heenan	Round Valley, Mendocino Co.
Yuki	Ralph Moore's father	Round Valley, Mendocino Co.
Coast Yuki	Samuel Ray	Round Valley, Mendocino Co.
Coast Yuki	Peter Bell	Round Valley, Mendocino Co.

## KEY TO ABBREVIATIONS

In the presentation of the separate kinship systems the following abbreviations for kinship terms have been adopted:

<i>Simple Terms</i>	<i>Affixes</i>
a aunt	c co-
b brother	g grand-
c cousin	gg great-grand-
ch child	l -in-law
d daughter	st step-
f father	x cross-
h husband	/ half-
m mother	// parallel-
mn man	
nc niece	
np nephew	
o older	
p parent	
s son	
sb sibling	
sp spouse	
ss sister	
u uncle	
w wife	
wm woman	
y younger	
♂ male	
♀ female	

Examples: f ss h, father's sister's husband; pl sb, parent-in-law's sibling; ♂//c, male parallel-cousin; cw, co-wife; mn u w, man's uncle's wife.

Asterisks indicate that the terms so marked are listed elsewhere in the kinship system.

# PART I

## DESCRIPTION AND DISCUSSION OF THE SEPARATE KINSHIP SYSTEMS

### ATHABASCAN

#### TOLOWA

The possessive prefixes *ci-* (my) and *nen-* (your) have been excised from the Tolowa terms herewith presented.

#### *Parent Class*

ta. F.	anigehi. S.
kaka. M.	sie. Mn d.
	yatce. Wm d.

#### *Grandparent Class*

ame'. F f, f p b, f p ♂ c.	triteceli. Ggp.
trene. F m, f p ss, f p ♀ c.	yanit. S ch, sb s ch, c s ch, gs ch.
sagi. M f, m p b, m p ♂ c.	tcayi. D ch, sb d ch, c d ch, gd ch.
su. M m, m p ss, m p ♀ c.	

The four gp and the two gch terms are extended to the collateral relatives, thus embracing the gp sb and the sb gch. The terms for the gch are also applied to the ggch, i.e., gs ch equals s ch and gd ch equals d ch.

#### *Sibling Class*

onigi. O b.	disle. Mn ss. Reference.
ati. O ss.	tce'le. Y b.
la'e. B.	eci. Y ss.

The sb terms apply also to /sb and //c.

#### *Uncle Class*

ayi. F b.	mite. Mn b ch.
ati. F ss.	*aci. Wm np, mn ss s.
ye. M b.	*actre. Wm nc, mn ss d.
*onkai. M ss.	

Four u-a terms denote not only the p sb but also the p c. The reciprocal np-nc terms also denote c ch. The f ss is identified with the o ss, yet strangely enough the reciprocals which denote np and nc are applied instead of the terms for y sb, which are used in other Athabascan dialects of California in which the f ss is identified with the o ss.

#### *Cousin Class*

onte. ♂ xc (first, second).	seti. Wm ♀ xc (first, second).
ontdesi. Mn ♀ xc (first, second).	

For //c and // second c the sb terms are employed according to the relative ages of the c concerned. In spite of the three special terms for xc, these are virtually sb, for their ch are reckoned as the ch of sb.

*Step-relation Class*

setstaxaleksi.	Stp. Reference.	*aci. Sts.
trine. Stf.		*actre. Std.
*onkai. Stm.		

No terms are employed for stsb, they not being regarded as relatives. The term for stf is not that for f b, as one would expect, but a special term usually employed for blood relatives following a death in the family, as described in the remarks at the end of the list of Tolowa kinship terms.

*Spouses of Uncles and Aunts*

*getre. Mn u w, w nc.	*ko. Mn a h, w np. In reference kaieyu.
*ge. Wm u w, h nc.	*gi. H np, wm a h.

These relatives by affinity are not merged in the u-a class as is frequently the case elsewhere, but are grouped with the sbl, just as though one's a or u were one's ss or b. This proceeding is quite logical in the case of f ss h, since f ss is called o ss, but it certainly seems illogical in the cases of the u and the other a. The custom, however, has Hupa and Whilkut precedent.

*Spouse Class*

tcetseni. H.	trone. W.
tetri. Cw.	

*Parent-in-law Class*

ontsi. Fl, pl b, sb fl.	gunta. Sl, sb sl, chl b.
metri. Ml, pl ss, sb ml.	yaset. Dl, sb dl, chl ss.

The sp f ss is called ml, not ssl, as one would have reason to expect since the f ss is called o ss.

*Grandparent-in-law Class*

This class is merged in the pl class, not in the gp class, as is frequently the case.

*Sibling-in-law Class*

*ko. Mn bl. In reference kaieyu.	lasen. W ss h.
*getre. Mn ssl.	asti. H b w.
*ge. Wm ssl.	*gi. Wm bl.

*Child's Parent-in-law*

Djoha, the term for this relation, is exclusive in its application.

Terms of reference for dead relatives are listed below. No literal translations for these circumlocutions were obtained: dead f, wenineseye; dead m, trañhaisu; dead ch, tcanisu; dead sb, kūninu; dead h, smene'nu; dead w, cadix-digetskia; dead f ss, teatlixnu. The ending -lixnu is said to mean "dead" and is added to other kinship terms to denote dead relatives.

Two terms, trixne and trine, are used by blood relatives following the death of a connecting relative or of a near relative to whom the speakers stand in mutually close relation. Trixne is applied to a surviving ss, trine to a surviving b, following the death of a sb. Trine is applied to stf, perhaps with reference



to the dead *f*. It is also used for *m b* at times, apparently following the death of the *m*, although this was not definitely ascertained. The *stm*, however, is not called *trixne*, as might be expected, but *onkai*, which is the term for *m ss*. *Trine* and *trixne* are used between *c* as between *sb*. *Trinxne*, a term for ghost or spirit, would seem to be related to *trine* and *trixne*. Two other ghost or spirit terms, *teyul* and *nawuttle*, appear unrelated. A widow is called *tsanwhel*, a remarried widow *sikoni*. Following the death of a *sb* the remaining *sb* do not alter the terms for the *p*.

Following the death of the connecting relative the term *tamage* is applied to relatives by affinity. After the divorce of the connecting relative, however, all terms are discontinued. As with the Hupa, no terms of affinity are employed following an elopement, that is, a union in which the man does not pay for his *w*. Nevertheless, if a *ch* is born, the *p* of the elopers call it *gch* just as though it were the issue of a legitimate marriage. No alterations in terms of affinity are made to recognize the advent of a baby whether its parents are legitimately or illegitimately united.

Brothers-in-law greet each other as "Dila, sko." (Translated as "Hello, brother-in-law.") The reply is "Ain, sko." (Translated as "Yes, brother-in-law.")

#### HUPA

The stems only are presented in the following list. In actual usage the terms consist of stem and prefix. The terms were obtained with three possessive prefixes: *wh-* and usually a vowel (*my*), *n-* and usually a vowel (*your*), *x-* and usually a vowel (*his or her*).

#### Parent Class

ta. F.	xai. S. Dr. Pliny Earle Goddard gives
antewiñ. M.	xai for child in the forms <i>xux xai</i> ,
ine or ineko. M. Term of address	a child, and <i>xux xaix</i> , children. <sup>6</sup>
used without possessive prefix.	tse. Mn d.
	yatce. Wm d.

#### Grandparent Class

maatewuñ. F f, fp b, f gf.	yal. S ch, sb s ch, gs ch.
tcin. F m, f p ss, f gm.	tsoi. Mn d ch, mn sb d ch, mn gd ch.
tchuwe. M f, m p b, m gf.	kyai. Wm d ch, wm sb d ch, wm gd ch.
tewo. M m, m p ss, m gm.	

#### Sibling and Cousin Classes

uñute. O b.	kil. Y b.
at. O ss.	dete. Y ss.

These four terms are extended to */sb* and to *c*, according to the relative ages of the individuals concerned.

#### Uncle Class

*tai. F b.	*tedilte. B ch.
aditewu. F ss.	*auw. Ss s.
is. M b.	*actce. Ss d.
*unkai. M ss.	

<sup>6</sup> The Morphology of the Hupa Language, present series, III, 24, 1905.

*Step-relation Class*

*tai. Stf.	*tedilte. Mn stch.
*unkai. Stm.	*auw. Wm sts.
	*actce. Wm std.

The three Hupa informants stated independently that there were no terms of relationship applied to stsb. Three Whilkut informants made the same assertion for that closely related dialect.

*Spouses of Uncles and Aunts*

*kai. A h, sp np.	*wetce. Mn u w, w nc.
	*we. Wm u w, h nc.

The Hupa call these relatives as their p call them, viz., sbl.

*Spouse Class*

xan. H.	aat. W. In reference the w is spoken
Lintce. Cw.	of as "my woman."

*Parent-in-law and Grandparent-in-law Classes*

wüntce.. Fl, pl b, gfl.	wündan. Sl, sb sl, gsl.
metcetcwuñ. Ml, pl ss, gml.	auwat. Dl, sb dl, gdl.
*Liñiuen. Chl sb, sb pl, gchl sb, sb gpl.	

It seems strange that the chl sb and the sb pl are not merged with the chl and pl, respectively, but are designated by the special term for ch pl.

*Sibling-in-law Class*

*kai. Bl.	*wetce. Mn ssl.
latse. W ss h, h b w.	*we. Wm ssl.

*Child's Parent-in-law*

\*Liñiuen. Chl p or ch pl. In address this term like ineko (mother) is employed without the possessive wh- (my). In the second and third persons, however, mi- (your) and xi- (his) are prefixed.  
 djidjinai. Relative by marriage following death of the connecting relative.

Following a divorce the relatives by affinity drop all terms. Similarly these relatives apply no terms to a couple who have eloped without the bridegroom paying for his bride. Such a pair are regarded as not married. The death or divorce of connecting blood relatives brings no alteration in terminology. Neither is a p addressed differently by the surviving ch following the loss of a ch. The birth of a ch to a newly married couple involves no change in the terms applied to the couple by their relatives by marriage.

Aside from the circumlocutions for dead relatives instanced by Dr. Goddard,<sup>7</sup> the following examples were obtained: whidjindinë, my dead f; whitciañxe, my dead m. A dead b or ss was referred to as "the both of us," and a dead h as "for which my hair is cut," referring to the custom of widows cutting the hair short.

<sup>7</sup> Life and Culture of the Hupa, present series, I, 74, 1903.

## WHILKUT

The Whilkut were the southwestern neighbors of the Hupa. "Their language differs slightly from that of the Hupa, from whom they were separated by a mountain ridge, and they might be considered a part of that tribe except that they seem to have had no political connection with them and differed in religious practices."<sup>8</sup>

The features of the Whilkut kinship system were established upon the testimony of three informants in the upper Mad River region, above Korbel, Humboldt county. Aside from a slight difference in pronunciation, the Whilkut terms duplicate those of the Hupa, and with one exception are applied in the same manner. The Whilkut identity the chl b and ss with the sl and dl, while the Hupa apply to these relatives the term for ch pl.

## MATTOLE

Dr. Goddard has generously furnished a brief list of Mattole terms obtained in October, 1907, from an informant named Joe Duncan. Dr. Goddard's orthography and the possessive prefixes are preserved in the subjoined presentation. The only class fully represented is the p class. It corresponds with Kato, Sink-yone, and Wailaki in possessing six terms, to wit: f, m, mn s, mn d, wm s, wm d.

*Parent Class*

bût xa (stem t'a?). His f.	bi ax xē. Her s (wm speaking).
mûn tewin, mûnte iñ. His m.	ci tsi. My d (mn speaking).
bie'. His s (mn speaking).	ci ate tce'. My d (wm speaking).

*Grandparent Class*

bût hwo. His gm.

*Uncle Class*

ba cē. Np (third person?).	ca cē. Nc (first person?).
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*Spouse Class*

ci k'a t'innē. My h.	ci ilca. My w.
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*Parent-in-law Class*

ci gan tce. My fl.	cig gan dan. My sl.
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*Sibling-in-law Class*

ci ge dîn. My bl.	cig ge. My cl.
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<sup>8</sup> P. E. Goddard, in Handbook of American Indians, Bureau Am. Ethn., Bull. 30, pt. 2, 938, 1910.

## LASSIK

The possessive prefixes have been excised from the terms presented in this list, as has also a suffix -tei, which occurs with many terms. Dr. Goddard considers -tei to be an endearing diminutive. The ending -seke in the terms laseke, aseke, and geseke may be teeke, woman, misspelled. Dr. Goddard records these three terms for female relatives without it, as they occur in Wailaki.

*Parent Class*

ta. F.	ai. Mn ch.
ne. M.	yas. Wm s.
	yatce. Wm d.

*Grandparent Class*

al. F f, f p b, f gf. Dr. Goddard obtained the term aga.	teo. M m, m p ss, m gm.
tcũñ. F m, f p ss, f gm.	yal. S ch, sb s ch, gs ch.
tcugi. M f, m p b, m gf.	tsoi. Mn d ch, mn sb d ch, mn gd ch.
	tcai. Wm d ch, wm sb d ch, wm gd ch.

*Sibling Class*

*on. O b.	*tcel. Y b.
*at. O ss.	*de. Y ss.

Terms for sb are applied to /sb, stsb, and c; also to certain relatives of the uncle class.

*Uncle Class*

*tisnet. F b.	*la. Mn b s.
*at. F ss. Dr. Goddard lists my f ss as cistabak, but is inclined to believe that the term is de- scriptive.	*laseke. Mn b d.
suk. M b.	*tcel. Wm b s.
*unkai. M ss.	*de. Wm b d.
	*as or nesyanit. Ss s.
	*aseke. Ss d. Dr. Goddard records this term in the form sastci with the meaning "my cw d."

F ss is denoted by the term for o ss. The reciprocals of the term for f ss normally apply to y b and y ss. The ch of c are reckoned as the ch of sb, and reciprocally the p c are called by the same terms as the p sb.

*Cousin Class*

*on. O ♂ //c (first, second, third), wm o ♂ xc (first, second, or third).	untu'. Mn ♂ xc (first, second, third). tce. Wm ♀ xc (first, second, third).
*at. O ♀ //c (first, second, third), mn o ♀ xc (first, second, third).	*tcel. Y ♂ //c (first, second, or third), wm y ♂ xc (first, second, or third). *de. Y ♀ //c (first, second, third), mn y ♀ xc (first, second, third).

All second and third c designate each other as though their p were sb.

*Step-relation Class*

*tisnet. Stf.	*laseke. Mn std.
*unkai. Stm.	*as. Wm sts.
*la. Mn sts.	*aseke. Wm std.

The sts are identified with the sb.

*Spouses of Uncles and Aunts*

*unkai. F b w.	*aseke. H b d.
*ge. Mn f ss h, w b s.	*geseke. W b d.
*geduñ. Wm f ss h.	*tsel. H ss s.
*at. M b w.	*de. H ss d.
*tisnet. M ss h.	*la. W ss s.
*as. H b s.	*laseke. W ss d.

Since the f ss is identified with the o ss, the Lassik consistently enough call the f ss h bl. Yet they inconsistently call the m b by a special term, while identifying his w with the o ss. Another case of inconsistent treatment arising from the identification of o ss with f ss will be noted under the pl class.

*Spouse Class*

katina. H.	teeke. W.
*tunte. Cw. Said to mean partner.	

*Parent-in-law Class*

süntce. Fl, pl b, sb fl.	yat. Mn dl, mn sb dl, mn chl ss. Dr. Goddard lists
betce. Ml, pl ss, sb ml.	the stem ùk for this relation.
gandani. Sl, sb sl, chl b.	yasat. Wm dl, wm sb dl, wm chl ss.

Since the f ss is called o ss, it would seem that she ought naturally to be called sl, instead of ml, by one's sp.

*Grandparent-in-law Class*

This class is completely merged in the gp class, a gsl being called gs as though he were the b, instead of the h, of the gd.

*Sibling-in-law Class*

*ge. Mn bl, wm ssl.	*geseke. Mn ssl.
*tunte. W ss h, h b w.	*geduñ. Wm bl.

The w b w is called by a ss term, the h ss h by a b term.

*Child's Parent-in-law*

The term kenage used for this relation is quite exclusive in its application.

Terms of affinity remained unaltered following the death of a connecting relative. The terms for p were not changed following the death of a ch, that is, a b or ss of the speaker.

## SINKYONE

The Sinkyone system here presented is a composite of three lists of terms, one obtained by Dr. Goddard, two by me. The data of these three lists were in some measure contradictory, owing to unsuitable informants having been interviewed. With the aid of the lists from the closely related Lassik, Wailaki, Kato, and Mattole, I have reconstructed the Sinkyone kinship system. The task was very much like putting together a block puzzle. The pieces were all in hand; it was merely a question of fitting them. I am confident that the system presented in the following pages contains very few errors.

Terms of affinity are not altered following the death of the connecting relative.

*Parent Class*

ta. F.	ai. Mn ch.
ne. M.	yac. Wm s.
	yatce. Wm d.

As a matter of fact, there are really six terms in the p class, for, although a mn calls his d by the same term as his s, he makes a slight change in the possessive prefix to indicate sex. He says caitei to his s, saitei to his d, the c- and s- meaning "my." This change also takes place in the corresponding terms in Wailaki and Kato.

*Grandparent Class*

abak. F f.	yal. S ch.
tcañ. F m.	tsoi. Mn d ch.
teigi. M f.	tcai. Wm d ch.
tco. M m.	

The gp and gch terms are applied to the ggp and ggh.

*Sibling Class*

onnaga. O b.	*tcal. Y b.
*ade. O ss.	*de. Y ss.

*Uncle Class*

*tisnet. F b.	*tcal. Wm b s.
*ade. F ss.	*de. Wm b d.
*súk. M b.	*as. Ss s.
*unkai. M ss.	*aseke. Ss d.
*la. Mn b ch.	yanit. Wm sb ch. As in Wailaki this term is synonymous with certain of the np-nc terms.

*Cousin Class*

Dependable data were secured only for //c. They are merged in the sb class according to sex and relative age.

*Step-relation Class*

*tisnet. Stf.	*la. Mn stch.
*unkai. Stm.	*as. Wm sts.
	*aseke. Wm std.

*Spouses of Uncles and Aunts*

\*unkai. F b w.

\*sùk. F ss h.

\*ade. M b w.

\*tisnet. M ss h.

\*as. Sp b s.

\*aseke. Sp b d.

\*teal. H ss s.

\*de. H ss d.

\*la. W ss ch.

*Spouse Class*

kantea. H.

attcan. W.

*Parent-in-law Class*

santce. Fl.

betce. Ml.

gandane. Sl.

yasak. Dl.

I fear that in the case of dl there may be a mistake. Wailaki, Lassik, and Kato distinguish between a mn dl and a wm dl.

*Grandparent-in-law Class*

The relatives of this class are merged in the gp and gch.

*Sibling-in-law Class*

ge. Mn bl, wm ssl.

lasuñ. W ss h.

getceke. Mn ssl.

geduñ. Wm bl.

*Child's Parent-in-law*

An exclusive term, kenage, covers this relation.

## WAILAKI

Only stems are listed, the possessive prefixes having been excised.

*Parent Class*

• ta. F.

nũñ. M.

et. Mn ch.

yac. Wm s.

yatce. Wm d.

In address there are really six terms employed, as a man distinguishes between my s and my d by a slight change in the prefix meaning. Thus my s is cet, but my d is set.

*Grandparent Class*

al. F f, f p b, f gf.

teũñ. F m, f p ss, f'gm.

teigi. M f, m p b, m gf.

teo. M m, m p ss, m gm.

yal. S ch, sb s ch, gs ch.

tsoi. Mn d ch, mn sb d ch, mn gd ch.

teai. Wm d ch, wm sb d ch, wm gd ch.

A single term is employed by both a mn and a wm for a s ch, while separate terms are employed for the d ch, which would seem to be a corollary of a wm distinguishing her s from her d.

*Sibling Class*

\*onuñ. O b.

\*tcil'. Y b.

\*at. O ss.

\*te. Y ss.

The sb terms are extended in application to include /sb.

*Uncle Class*

\*tisnet. F b.

\*la. Mn b ch.

\*at. F ss.

\*tcil'. Wm b s.

\*kianik. M b.

\*te. Wm b d.

\*inkait. M ss.

\*as. Ss ch.

*Cousin Class*

\*onuñ. O ♂ //c (first, second, third),  
wm o ♂ xc (first, second,  
third).

\*tcet. Wm ♀ xc (first, second, third).

\*tcil'. Y ♂ //c (first, second, third), wm  
y ♂ xc (first, second, third).

\*at. O ♀ //c (first, second, third), mn  
o ♀ xc (first, second, third).

\*te. Y ♀ //c (first, second, third), mn y  
♀ xc (first, second, third).

\*un'd. Mn ♂ xc (first, second, third).

The ch of any two c of like sex employ the sb terms. The ch of any two c of unlike sex use the terms employed by the ch of a b and a ss. Thus second and third c are called by the same terms as first c. The ch of one's c are called np and nc and the gch of one's c are called gch.

*Step-relation Class*

\*tisnet. Stf.

\*la. Mn stch.

\*inkait. Stm.

\*as. Wm stch.

For stsb the sb terms are employed.

*Spouses of Uncles and Aunts*

\*inkait. F b w.

\*as. Sp b ch.

\*kianik. F ss h.

\*tcil'. H ss s.

\*at. M b w.

\*te. H ss d.

\*tisnet. M ss h.

\*la. W ss ch.

Like Kato, but unlike Lassik, Wailaki inconsistently identifies the f ss h with the m b instead of with the ss h, where he would seem to belong, since the f ss is called by the same term as the o ss.

*Spouse Class*

kinai. H.

aat. W.

kank. H.

teket. W.

\*tcet. Cw.

*Parent-in-law Class*

tante. Fl, pl b, sb fl.

gandani. Sl, sb sl, chl b.

betci. Ml, pl ss, sb ml.

yat. Mn dl, mn sb dl, mn chl ss.

yacat. Wm dl, wm sb dl, wm chl ss.

Wailaki and Lassik are both inconsistent in the matter of a wm fraternal np and nc. Although these are called respectively y b and y ss, their sp are chl instead of sbl.



*Grandparent-in-law Class*

These relatives by affinity are merged in the blood relatives of the gp class, instead of in the relatives by marriage in the pl class.

*Sibling-in-law Class*

ge. Mn bl, wm ssl.	getcek. Mn ssl.
*un'd. W ss h.	geduñ. Wm bl. The reciprocal is getcek.
*tcet. H b w.	

*Child's Parent-in-law*

The single term for this class, kenage, embraces only this relationship.

Following the death of the connecting relative no change was made in the terms of affinity. Likewise no change was made in the terms for p following the death of the speaker's sb.

## KATO

The Kato kinship system as here presented is based on the statements of one informant, Bill Ray, the man from whom Dr. Goddard secured his "Kato Texts."<sup>9</sup>

The terms were obtained with the prefix c- or s- (my), which has been omitted in the succeeding list.

*Parent Class*

ta. F.	yateetc. Wm d.
nan. M.	ki. Boy. This term and a plural form kik
itc. Mn ch.	(ch) are listed by Dr. Goddard. <sup>10</sup>
yac. Wm s.	

The latter form is used as a term of address in a text presented by him.<sup>11</sup>

*Grandparent Class*

tcau. F f, f p b, m gf.	yal. S ch, sb s ch.
tcuñ. F m, f p ss, m gm.	tsoi. Mn d ch, mn sb d ch.
tc'gi. M f, m p b, f gf.	teo. M m, m p ss, f gm.
	tcai. Wm d ch, wm sb d ch.

It is to be noted that the maternal ggf is included under the term for paternal gf. Similarly the paternal ggf is grouped with the maternal gf, the maternal ggm with the paternal gm, and the paternal ggm with the maternal gm. This deliberate crossing of the lines of ascent extends to the reciprocal terms for ggeh. Compare the similar Coast Yuki treatment of great and collateral gp.

*Sibling Class*

*onuñ. O b.	*tcelc. Y b.
*at. O ss.	*t'eci. Y ss.

The terms are applied to /sb.

<sup>9</sup> Present series, v, 65-238, 1909.

<sup>10</sup> Elements of the Kato Language, present series, xi, 23, 1912.

<sup>11</sup> Kato Texts, present series, v, 105, 1909.

*Uncle Class*

*tai. F b.	*lastce. Mn b d.
*at. F ss.	*tcelc. Wm b s.
*tcuñkanai. M b.	*t'eci. Wm b d.
*unkai. M ss.	*ac. Ss s, ♀ c s.
*la. Mn b s.	*asce. Ss d, ♀ cd.

*Cousin Class*

*onuñ. O ♂ //c (first, second, or third), wm o ♂ xc (first, second, third).	*tcelc. Y ♂ //c (first, second, third), wm y ♂ xc (first, second, third).
*at. O ♀ //c (first, second, third), mn o ♀ xc (first, second, third).	*t'eci. Y ♀ //c (first, second, third), mn y ♀ xc (first, second, third).
*únt or úndi. <sup>12</sup> Mn ♂ xc (first, second, third).	*tcet. Wm ♀ xc (first, second, third).

*Step-relation Class*

*tai. Stf.	*la. Mn sts.
*unkai. Stm.	*lastce. Mn std.
	*ac. Wm sts.
	*asce. Wm std.

Stsb are merged in sb.

*Spouses of Uncles and Aunts*

*unkai. F b w.	*asce. Sp b d.
*tcuñkanai. F ss h.	*tcelc. H ss s.
*at. M b w.	*t'eci. H ss d.
*tai. M ss h.	*la. W ss s.
*ac. Sp b s.	*lastce. W ss d.

*Spouse Class*

yedúñ. H.	yetcek. W.
*tcet. Cw.	

*Parent-in-law Class*

cantce. Fl, pl b, sb fl.	gúndan. Sl, mn sb sl, wm ss sl, chl b.
betsi. Ml, ml ss, sb ml.	yat. Mn dl, mn sb dl, mn chl ss.
*getcek. Mn fl ss.	yacat. Wm dl, wm ss dl, wm chl ss.
*ge. Wm fl ss, wm b s w.	*gedúñ. Wm b d h.

The f ss is called o ss; hence the fl ss becomes a ssl with the corresponding sbl reciprocals.

*Grandparent-in-law Class*

The gpl is not identified with the pl, but with the gp. The reciprocals are the terms for gch.

<sup>12</sup> This stem occurs in the word cundibaci, to which Dr. Goddard's informant gave the meaning "my np," although the context seems to indicate that c is really meant. See Kato Texts, present series, v, 145, 146, 1909.

*Sibling-in-law Class*

\*ge. Mn bl, wm ssl, h ss s w.

\*geteek. Mn sl.

\*gedûñ. Wm bl.

\*teet. H b w.

\*ûnt or ûndi. W ss h.

*Child's Parent-in-law*

The term katetigaiyi employed for this relation is peculiar to Kato.

Following the death of a sp, terms of affinity are continued. Only when a separation takes place are the terms discontinued.

## YUROK

The Yurok data presented in the following pages were obtained from three informants and represent the Klamath River dialect. The kinship system disclosed by these data is an exceedingly simple one, approaching closely the European type. Dr. Kroeber has already presented a virtually complete Yurok system,<sup>13</sup> with which the following system agrees in most details, except that the violation of the principle of generation in the u and c classes did not appear in my data. When questioned in this regard my informants denied all knowledge of the peculiar uses of terms mentioned by Dr. Kroeber. Because of its unusual features and its value for comparison it seems worth while to publish again the complete Yurok system, which, together with Wiyot, stands out as unique in California.

Most of the terms were obtained with the prefix ne- or no- (my).

*Parent Class*

tot. F (address).

netac. Ch (address).

nepcets. F (reference).

nooksa. Ch (address).

kok. M (address).

negnemem. S (reference).

netseko. M (reference).

nemehi. D (reference).

*Grandparent Class*

nepits. Gf, gp b, ggf.

nekepeu. Gch, sb gch, ggf.

nekuts. Gm, gp ss, ggf.

*Sibling and Cousin Classes*

nemit. . O b, o ♂ c (address).

neikeu. Y sb, y c (address).

nepin. O ss, o ♀ c (address).

tcitc. Very y sb, very y c (address).

nepa'. Mn b, mn ♂ c (reference).

neweyits. Mn ss, mn ♀ c (reference).

nelai. Wm b, wm ♂ c (reference).

nelet. Wm ss, wm ♀ c (reference).

All the above terms apply also to /sb and stsb.

*Uncle Class*

\*netsim. U.

\*nektsum. Np.

\*netul. A.

\*neramets. Nc.

<sup>13</sup> California Kinship Systems, present series, XII, 374, 1917.

*Step-relation Class*

\*netsim. Stf.

\*nektsum. Sts.

\*netul. Stm.

\*neramets. Std.

Stsb are designated as sb.

*Spouses of Uncles and Aunts*

As in Wiyot, no terms are applied to these relatives by marriage, nor do they in turn apply any to their sp np and nc. Yurok living with the Hupa sometimes follow Hupa usage and designate relatives of this class as sbl.

*Spouse Class*

neyis. Sp (address).  
nenos. H (reference).

nepeu. W (reference).

*Parent-in-law Class*

nepareu. Fl.

netsneu. Sl.

netsewin. Ml.

nekep. Dl.

\*nekwa. Sp p sb, sb ch sp, sb sp p, ch sp sb.

The collateral relatives are not included in these terms, which is rather unusual, but are all grouped under the one term nekwa, which is also applied to the ch pl.

*Grandparent-in-law Class*

Difference in generation is disregarded and relatives of this class are assimilated to the pl class.

*Sibling-in-law Class*

netei. Mn bl, w ss h.  
netsna. Wm bl.

netsnin. Ssl, h b w.

*Child's Parent-in-law*

\*nekwa. Ch sp p.

The levirate was practiced, as was also marriage to the w ss particularly following the death of the w. A small payment was made for the w ss in such a case. Following this payment the use of the term netsker, which is employed between affinities after the death of the connecting relative, was discontinued, and the ordinary terms of affinity were resumed. If, on the contrary, the widower married a woman other than his ssl, he incurred the disapproval of his deceased w p. In retaliation they dropped both the ordinary term for sl and the mourning term netsker.

Less frequently a mn married his w ss during his w lifetime. A plurality of w was evidently common, and tradition tells of a Yurok man with ten w. The same is reputed of a Hupa man. Ten is the ceremonial number, and the possession of ten w among both peoples was an evidence of great wealth on the part of the h.

Following the separation of a mn and w all terms of affinity are discontinued. In the case of an elopement in which the mn does not pay his w p, the terms of affinity are not employed, as the couple are not regarded as married until the payment is made. If a ch is born of such a union, it is recognized as a gch,

however. The refusal to recognize relationship does not extend to blood relatives. Elopements in early times are said to have been exceedingly rare.

Following the birth of a *ch* the terms of affinity applied to its *p* are not altered. The terms for *p* are not replaced following the death of a *ch*, that is, a *sb* of the speaker.

In addition to the terms for deceased relatives obtained by Dr. T. T. Waterman and published by Dr. Kroeber,<sup>14</sup> the writer obtained two more: *Neknokseks*, dead *p*, is said to mean "I am left." It is sometimes qualified by "man's side" or "woman's side" to acquaint the hearer with whether it is the *f* or the *m* who is dead. *Neko* is spoken of a dead *ch* or dead *sb*.

## WIYOT

The Wiyot kinship data presented in the following pages were obtained from four informants living in the Humboldt Bay region. All terms, when used in address, are preceded by the prefix *yi-* (*my*), and with two exceptions were recorded with this prefix.

### Parent Class

<i>yidac.</i> F.	<i>yidutcik.</i> Ch.
<i>yidokar.</i> M, d.	<i>yidar.</i> S.

### Grandparent Class

* <i>yibitcote.</i> Gf.	<i>yidokox.</i> Gp ss, ggm.
* <i>yidokotck.</i> Gm.	* <i>yidokgas.</i> Gch.
<i>yibitcox.</i> Gp b, ggf.	<i>yigulkLax.</i> Sb gch, ggeh.

### Sibling Class

* <i>yidux.</i> Sb, maternal/sb	<i>yigutswilan.</i> Paternal/sb.
---------------------------------	----------------------------------

### Uncle Class

<i>yigateck.</i> F b.	<i>yigau.</i> Np.
<i>yidjok.</i> M b.	<i>yidjuutck.</i> Np (endearing).
<i>yibauk.</i> F ss.	<i>yisalibas.</i> Nc.
<i>yidjul.</i> M ss.	<i>yidukutk.</i> Nc (endearing).

The above terms are applied to the *p* c and to the *c* ch.

### Cousin Class

- yibe.* First *c*, third *c*. In reference *dilibe* is used, *my c* being *yidilibe*.  
 \**yidux.* Second *c*, fourth *c*.

The first and third *c* are known by a term equivalent to English *c*—a feature exceedingly rare in California kinship systems. In the classification of *c*, the alternation of the *c* and *sb* terms according to the degree of removal is curious and reminiscent of an allied Yuma practice. That the first and third *c* are essentially *sb* after all is obvious from the fact that the *c* *ch* are designated by the same terms as the *sb* *ch* and, reciprocally, the *p* *c* are addressed by the same terms as the *p* *sb*.

<sup>14</sup> California Kinship Systems, present series, XII, 375, 1917.

### *Step-relation Class*

The term for sb is applied to stsb. Yet, in spite of merging these two groups of relatives, my four Wiyot informants insisted that no terms were used for stp or stch. They declared that individuals standing in such relation to each other were not regarded as relatives.

### *Spouses of Uncles and Aunts*

The Wiyot do not regard the sp of an u or a as a relative and therefore apply no term of relationship. The same holds for the reciprocal relation, sp np or sp nc.

### *Spouse Class*

hakwi.	Sp (endearing).	wiliwita.	Cw.
yidukuwi.	H (said to mean "my mn").	yidutakabuc.	W (said to mean "my wm").
		yiwwat.	W.

### *Parent-in-law Class*

yidokas.	Fl, sb fl.	yidatserap.	Sl, chl b, sb sl.
yidokat.	MI, sb ml.	yigas.	DI, ch ss, sb dl.

Informants stated that no term was used for pl sb, the reciprocal of sibling's sl (yidatserap) and of sb dl (yigas).

### *Grandparent-in-law Class*

*yibitcote.	Sp gf.	*yidokgas.	Gch sp.
*yidokotck.	Sp gm.		

### *Sibling-in-law Class*

yidak'ir.	Mn bl, w ♂ c, mn ♀ c h.
yidats.	Wm bl, ssl, w ♀ c, wm ♀ c h, h c, ♂ c w.

No terms are applied to the w ss h nor the h b w.

### *Child's Parent-in-law*

As in most Californian languages, a distinctive term is employed for this three-step relationship. It is yiderenak.

The following miscellaneous notes have a bearing upon the Wiyot kinship system. The ch of a family are referred to as sketiladix, "born first," swicee, "last baby." DesLelrelatoka refers to the ch of one m by two f, in other words, maternal /sb. Dahodexaredaksi refers to stch.

The levirate (witkaliwer) was practiced. Marriage to the w ss also took place, particularly after the death of the w, when it was without payment. This occurred when the mn was "good," as the family of the deceased wished to "keep him."

Terms of affinity were discontinued following the death of the connecting relative. They were not altered following the birth of a ch to the connecting relative. The terms for f and m were not changed following the loss of a ch, that is, a sb of the speaker. No special terms of reference for the dead were obtained.

## KAROK

The Karok kinship terms here presented are from the northern portion of the Karok area and were obtained from a single informant, Mrs. Ella Pierce, a native of Clear Creek, Siskiyou county, California. The terms are all words of address unless otherwise stated. In actual use each term is preceded by nani (my). Dr. Kroeber secured a kinship system from the southern Karok. He has kindly allowed me the use of the data. Where they disagree with my own from the northern Karok I have noted the fact.

*Parent Class*

- |          |             |
|----------|-------------|
| aka. F.  | kate. S.    |
| ifyu. F. | yatekan. D. |
| tat. M.  |             |
- \*heite. Ch. The form heite was obtained by both Dr. Kroeber and myself for mn b ch. It is perhaps the correct stem, although evidence seems to point to the simpler form *ite* or *ic* as the naked stem: I obtained akheite for ch, icmit for dead ch, heite for mn b ch, heitemit for mn b dead ch, and icavaci for mn b ch and wm ss ch following the death of the connecting relative.

*Grandparent Class*

- |   |                 |
|---|-----------------|
| atic. F p, s ch, f p sb, sb s ch, f gp. | aticbiye Gs ch. |
|---|-----------------|
- gut. M f, d s, m p b, mn sb d ch, m gf. Dr. Kroeber obtained this term with the ending—ate in its application to the d s. He also obtained the term gutavaci for ggf. This term I obtained with the meaning "m f or d s following death of connecting relative." In the case of a ggf, it is not unlikely that frequently one of the connecting relatives is dead, thus making logical the use of gutavaci.
- git. M m, d d, m p ss, wm sb d ch, m gm. Dr. Kroeber obtained this term with the ending -ate in its application to the d d.
- ipgutbite. Gd s.
- ipgitbiye. Gd d.

*Sibling and Cousin Classes*

- |          |            |
|----------|------------|
| tipa. B. | gustan. S. |
|----------|------------|
- anihite. O b. Dr. Kroeber obtained from the southern Karok the term hukum for o b.
- |  |             |
|--|-------------|
|  | djac. Y b.  |
|  | djie. Y ss. |
- nanate. O ss.

All sb terms embrace /sb and c according to sex and relative age.

*Uncle Class*

- |                                  |  |
|----------------------------------|--|
| para. F b.                       | *heite. Mn b ch.                         |
| miidjits. F ss.                  | ufadjic. Wm b s.                         |
| hogam or hogamite. M b, mn ss s. | funidjic. <sup>15</sup> Wm b d, mn ss d. |
| djukate. M ss.                   | yicukits. Wm ss ch.                      |

<sup>15</sup> Dr. Kroeber was given the meaning mn np or nc for funidjic. Two other terms obtained by him include portions of this meaning, however: heite, mn b ch; munateic, mn ss ch. The term for wm np or nc he recorded as mis.

*Step-relation Class*

ptatpa. Stp.	padamapa. Stch.
tipahiitewa. Stb.	gustanhiitewa. Stss.

*Spouses of Uncles and Aunts*

*munac. Mn u w, h sb s, wm a h, w sb d.	*ut. Wm u w, h sb d.
	*eri. Mn a h, w sb s.

*Spouse Class*

avan. H.	iloha. W.
ini. Cw.	

*Parent-in-law Class*

fikuwan. Fl.	ikam. Sl.
faratipic. Ml.	iram. Dl.

The // to English is exact, for the collateral relatives of both ascending and descending generations are excluded and are denoted by the term employed in most groups exclusively for the ch pl.

*Grandparent-in-law Class*

This class is merged in the pl class.

*Sibling-in-law Class*

*eri. Mn bl.	*ut. Wm ssl.
hakanifmax. W ss h.	*munac. Mn ssl, wm bl.
hakaniyedax. H b w.	

*Child's Parent-in-law*

namix. Ch pl, sb pl, chl sb. From the southern Karok Dr. Kroeber records the term namic (apparently the same as northern namix) with the meaning sp sb.

In case a mn married without making the required payment for a wm customary in northwestern California, all the terms of affinity involved by such a marriage were used with the suffix -hiitewa, which the informant thought might mean "no relative." She stated that this suffix was added not only to such terms as those for sl (ikam) and ml (faratipic) but also to the more remote terms as those for w ss h (hakanifmax), h b w (hakaniyedax), ch sp p (namix), h b ch (munac and ut), w b ch (munac and eri), and f b w (munac and ut). This suffix is not used for blood relatives, however, in case of such an improper marriage; for example, it is not added to the terms for gch if the speaker's s or d is improperly married. This suffix is said to be added to the terms of address. Its alleged meaning, "no relative," seems likely, since it occurs in the terms for stb (tipahiitewa) and stss (gustanhiitewa). If the meaning is correct, then the terms for those two relatives really mean "b no relative" and "ss no relative."

To the ensuing terms of affinity following the divorce of the connecting relative the suffix -han or -rahan is added: munac (sp of wm a or mn u and reciprocal, bl, ssl), ut (w of wm u and reciprocal, ssl), eri (h of mn a and reciprocal, bl), fikuwan (fl), faratipic (ml), ikam (sl), idam (dl), hakanifmax (w ss h), hakaniyedax (h b w), and namix (ch sp p). The terms for h (avan) and wife



(iloha) take the suffix -han following a separation. Of the above terms, the following take the suffix -han: munac, ut in the form ot, fikuwan, faratipic, ikam in the form igam, idam, and namix, which with the suffix is written namhan. The following terms take the suffix -rahan: eri, hakanifmax, and hakaniyedax.

The word -imtaracon is added to the three terms for gp and geh (atic, gut, git), if the connecting relatives (that is, the s or d of the gp and the f or m of the geh) are divorced. With this suffix added the terms are used only in reference. The terms of address remain unchanged.

The word -avaci or -vaci is suffixed to the three terms for gp and geh if the connecting relative dies. The terms become atievaci, gutavaci, and gitavaci. Similarly terms for a, u, nc, up take this suffix following the death of one's p or one's b or ss: the term para (f b) becomes paravaci following the death of the speaker's f. The same suffix is found in the reciprocal term icavaci. The term miidjits (f ss) becomes mitcavaci upon the f death with the reciprocals changed from ufadjic (wm b s) to ufidjavaci and from funidjic (wm b d) to funitevaci. The term hogam (m b and mn ss s) becomes hogambaci following m death; djukate (m ss) becomes djukateuvaci.

For all terms of affinity following the death of the connecting relative the term gardim is used. Its exact applications are given in the following list:

- F b w following death of f b.
- H b s following death of h.
- H b d following death of h.
- F ss h following death of f ss.
- W b s following death of w.
- W b d following death of w.
- M b w following death of m b.
- H ss s following death of h.
- H ss d following of h.
- M ss h following death of m ss.
- W ss s following death of w.
- W ss d following death of w.
- Sp f following death of sp.
- D h following death of d.
- Sp m following death of spouse.
- S w following death of s.
- Sl b or s following death of speaker's d.
- Dl ss or b following death of speaker's s.
- W b following death of w.
- Mn ss h following death of ss.
- W ss following death of w.
- Wm ss h following death of ss.
- H b following death of h.
- Mn b w following death of b.
- H ss following death of h.
- Wm b w following death of b.
- Ch sp p following death of either ch or sp.

Special terms of reference are used for immediate dead relatives. These terms are doubtless circumlocutions. The actual meanings were not obtained. The following were obtained: kohimateko and kuakûm for dead f, xgus for dead m, surukûm for dead s or d, hakani for dead b or ss, and hakaninamik for dead h or w. All other dead relatives, both by blood and by marriage, are spoken of by the usual term of relationship plus the suffix -mit.

## CHIMARIKO

The following brief list of Chimariko terms of relationship is taken from Dr. Roland B. Dixon's paper on "The Chimariko Indians and Language."<sup>16</sup> The list shows at least a few of the features of the kinship system.

*Parent Class*

itcila. F.  
cido. M.

oella. S.  
masola. D.

*Grandparent Class*

xawila. F f.

\*himolla. Gs.

*Sibling Class*

uluida. B.

antxasa. O ss.

*Uncle Class*

magola. U (paternal or maternal).  
uluida (?). F ss.  
malai or mutala. M ss.

\*himolla. B ch, nc, np.  
micaku. Np.

*Cousin Class*

antxala. C.

\*himolla. F ss ch.

*Step-relation Class*

matrida. Stf.

*Spouse Class*

puntsar. W.

*Parent-in-law Class*

teumaku. Fl.  
teumakosa. Ml.

itcumda. Sl.  
teusimda. Dl.

*Sibling-in-law Class*

meku. Bl.

maxa. Ssl.

<sup>16</sup> Present series, v, 363 ff., 1910.

## SHASTAN

## SHASTA

The terms of relationship in the Shasta language were obtained from informants living in the vicinity of Yreka, Siskiyou county. Terms in actual use are preceded by possessives. I obtained all the terms with the possessive yapo- (my).

*Parent Class*

- |                                    |             |
|------------------------------------|-------------|
| ata. F. In reference ati is used.  | aiyaki. D.  |
| ani. M. In reference aksi is used. | yaxaxe. Ch. |
| akwi. S.                           | one. Baby.  |

The terms for child and baby are used only for small children as we use the equivalent English terms. They seem to have been rather for reference than for address.

*Grandparent Class*

- atsmo. F f, mn s ch, f f b, mn b s ch.  
 amo. F m, wm s ch, f m-ss, wm ss s ch. The term amaki is an alternative for the last two meanings of amo.  
 akwit. M f, mn d ch, m f b, mn b d ch.  
 atcidi. M m, wm d ch, m m ss, wm ss d ch. The term amaki is an alternative term for the last two meanings of atcidi.  
 \*kuya. Gm b, mn ss gch, ggf, mn ggch.  
 \*amaki. Gp ss, wm sb gch.  
 teidi. Ggm, wm ggch, ggm ss, wm ss ggch.

*Sibling Class*

- |  |                          |
|--|--------------------------|
| *apo. B.   | *atcugwi. Y ss.          |
| *atcu. O ss. The reference form of this term is said to be atci. | kwako. Wm b (reference). |
| kadiwa. Mn b (reference).  |                          |
- The sb terms apply also to /sb.

*Uncle Class*

- |                         |                         |
|-------------------------|-------------------------|
| *arodsa. F b, mn b ch.  | apaki. M b, mn ss ch.   |
| *ambaki. F ss, wm b ch. | *anidi. M ss, wm ss ch. |

The terms of the u class apply to the p c as well as to the p sb, and to the c ch as well as to the sb ch.

*Cousin Class*

- |                    |                        |
|--------------------|------------------------|
| *apo. ♂ //c.       | ustci. ♂ xc, m n ♀ xc. |
| *atcu. O ♀ //c.    | aswi. Wm ♀ xc.         |
| *atcugwi. Y ♀ //c. |                        |

*Step-relation Class*

\*arodsa. Stf, mn stch.

\*kuya. Stp f, mn ch stch.

\*anidi. Stm, wm stch.

\*amaki. Stp m, wm ch stch.

*Spouses of Uncles and Aunts*

\*arodsa. M ss h, w ss ch.

\*anidi. F b w, h b ch.

\*ambaki. M b w, h ss ch.

\*kuya. F ss h, w b ch.

*Spouse Class*

awatikwa. H.

tarixsi. W.

kusewahatu. Cw.

kahe. W.

amakwai. Earlier cw.

wusewaiiki. Later cw.

*Parent-in-law Class*

wepsit. Fl, sl, sb fl, chl b, fl b, mn b sl, wm ss sl.

awawit. Ml, dl, sb ml, chl ss, ml ss, mn b dl, wm ss dl.

*Sibling-in-law Class*

iyaki. Mn bl.

adawasi. Wm ssl.

atari. Mn ssl, wm bl.

kusewahatu. W ss h, h b w.

*Child's Parent-in-law*

The term for this relation, *ikiwaba*, is exclusive in application.

The Karok custom of adding a suffix, said to mean "no relative," to terms of affinity which are the result of an improper marriage (one in which the bride is not paid for) has no analogue among the Shasta. Such a marriage, however, was looked upon as improper among the Shasta as among the Karok. Informants stated that if a w in such a marriage were about to bear a ch the h would hasten to make a payment to his w p in order that the ch might be "somebody."

Terms of affinity were discontinued following a divorce, which consisted of the wm family refunding the purchase price and of the h returning to the w family the gifts which came with her. The divorce was not consummated until these exchanges had been made.

Following the death of the connecting relative all terms of affinity are replaced by the term *kaiyugûsi*. No affixes are added to the terms involved, as in some languages.

A widow might not marry without the consent of her dead h b, who was entitled to marry her. One informant stated that failure on the part of the widow to observe this rule would lead to her killing. A widow or widower is called *watsetama*. This is not a term of relationship, but is merely a term of reference, also applied to one who has lost a ch.

The suffix added to the terms of address of relatives recently bereaved is -psi, -opsi, -dopsi, or -ipsi. This is added to personal names at times. Its application among terms of relationship is said to include even the terms for nc, np, a, u, and gp, and the terms of affinity. The following examples were obtained:

atadopsi. F following the death of a ch (address).

atipsi. F following the death of a ch (reference).

anipsi. M following the death of a ch (address).

axksipsi. M following the death of a ch (reference).

akwipsi. S following the death of one of p or of one of speaker's ch.

aiyakupsi. D following the death of one of p or of one of speaker's ch.

omêpsi. Ch following death of one of speaker's ch.

Terms of reference for dead relatives are used for but a few years, after which dead relatives are referred to by the usual terms of reference which were used when they were alive. One informant cited as unusual the case of a *wm* who used the special terms for ten years. Where no special term exists for a dead relative the prefix *geg-* or *gege-* is generally added to the usual term. The following list of dead relatives together with the normal terms of reference in parentheses displays the scope of this custom. The term is applied to all the relatives normally grouped under one term:

kekohama. F (ati).  
 gutswat. M (aksi).  
 kehaikau. M (aksi).  
 gastambix. Offspring (akwi, aiyaki).  
 kwakiweti. O b (apo).  
 kwakiwethaiya. Y b (apo).  
 gigeŋsi. O ss (atcu).  
 gigeŋsihaiya. Y ss (atcuŋwi).  
 gegerotsi. F b (arodsa).  
 gegenoti. F b w (anidi).  
 gegambaxi. F ss (ambaki).

kuyaki. F ss h (kuya).  
 gegeustci. F ss s (ustci).  
 gegeaswi. F ss d (aswi).  
 gegepaki. M b (apaki).  
 gegeatsmo. F f (atsmo).  
 gegeamo. F m (amo).  
 gegeakwit. M f (akwit).  
 gegeatcidi. M m (atcidi).  
 awatitwaki. H (awatitwa).  
 tarixsaiki. W (tarixsi).  
 kaheki. W (kahe).

#### ACHOMAWI

Three informants were interviewed: (1) Charles Green (aged 53) of Fall River, Shasta county; (2) his daughter Ima; and (3) Mrs. Mabel Jackson, living at Klamath Agency, Oregon. Green and his daughter were both seen in San Francisco. Unfortunately the data obtained from them were left at home when the visit was made to Klamath Agency. Hence the data from Mrs. Jackson were procured without reference to those already in hand.

Unless otherwise stated, the terms here presented may be regarded as vocative forms. In actual address terms are preceded by *'tu* (my).

In the non-vocative forms the terms are preceded by the pronouns *'tu* (my), *'tuni* (our), *mimo* (your), and *gateu* (his or her). *Mimo* is frequently replaced by *m*, as, for example, in *matun*, which is used as a substitute for *mimo watu-nuwi*. The examples of such substitutions are the following, which were all obtained from Miss Green:

Long form	Short form
<i>mimo datyi</i> (m)	<i>mani</i>
<i>mimo wabaui</i> (o b)	<i>maba</i>
<i>mimo wabiswi</i> (o ss)	<i>mapis</i>
<i>mimo watunui</i> (y b)	<i>matun</i>
<i>mimo wenunwi</i> (y ss)	<i>menun</i>
<i>mimo tceste</i> (f b)	<i>matceste</i>
<i>mimo tcini</i> (m b)	<i>matcini</i>
<i>mimo tceŋm̄m</i> (m ss)	<i>matceŋm̄m</i>
<i>mimo wabuui</i> (f f)	<i>mabu</i>
<i>mimo wakuui</i> (m f)	<i>maku</i>
<i>mimo wamuui</i> (f m)	<i>mamu</i>
<i>mimo watcuui</i> (m m)	<i>matcu</i>
<i>mimo waloui</i> (ml)	<i>malu</i>

Dr. Edward Sapir writes me concerning these long and short forms: "It seems that there are two distinct types of forms involved, analytic and synthetic

(‘thine mother’ and ‘thy-mother’). In Paiute, for instance, one can say either *of-me mother* or *mother-my*, the ‘of-me’ being a word of three syllables, whereas the ‘my’ is a monosyllabic suffix.”

Besides being indebted to Dr. Sapir, I am likewise under obligation to Dr. Roland B. Dixon for his kindly criticism of my data.

### *Parent Class*

wa. i. F.

datyi. M. From informant 2 a term ani (in the form mani, your mother) was obtained.

balatei. S. Informant 3 also gave teilet as a term for s.

watawui. D.

### *Grandparent Class*

abun. F f, mn s ch, f f sb, b s ch. In reference wabuui is used.

amun. F m, wm s ch, f m sb, ss s ch. In reference wamuui is used.

akun. M f, mn d ch, m f sb, b d ch. In reference wakuui is used.

atcun. M m, wm d ch, m m sb, ss d ch. In reference watcuui is used.

isat. Ggp, ggch, and doubtless ggp sb as the meaning ggm ss was obtained. The term also means “ear.”

The grandparent terms are extended to collateral relatives in an unusual way. Not only the gp b but also the gp ss is called gf. Similarly the gp b as well as the gp ss is called gm. The same peculiar application of the terms holds in the reciprocal relation of gch.

### *Sibling Class*

waba.ui. O b, o /b.

atun. Y b, y /b. The non-vocative form of this term, watunuwi, is said to be used vocatively also.

abis. O ss, o /ss. The non-vocative form of this form, wabiswi, is said to be used vocatively also.

enun. Y ss, y /ss. The non-vocative form of this term, wenuunwi, is said to be used vocatively also.

matswe. Wm b, mn ss. Obtained from informants 1 and 2; non-vocative in use.

tiyau. Mn y b. This term is said to be chiefly non-vocative in use. It was not procured from informant 3. It is not used by wm. Informant number 1 told of an alien wm who married an Achomawi and persisted in using tiyau when speaking of her y b. People were amused and remarked of her: “She talks like a mn.”

wal’udji. Sb, /sb. Obtained from informant 3 only.

waneuwi. /sb (informant 3 only).

### *Uncle Class*

teeste. F b, mn b ch.

hamut. F ss, wm b ch. Obtained as wahamutwi from informant 3.

teini. M b. Obtained from informant 3 as watciniwi.

titauui. Mn ss ch. Obtained also as wadutitawi and watutitauui.

tcemûm. M ss, wm ss ch. From informant 3 it was obtained in the form watcemûmui.

diaha. First c once removed.

The terms of this class do not apply to c ch as to sb ch, nor to p c as to p sb. We find instead a special self-reciprocal term denoting first c once removed.



*Child's Parent-in-law*

umukui. Ch sp p. Informant 3 said that tenalete, which means "relative by marriage," might also be used for this relation.

The following points of interest have a more or less direct bearing on the Achomawi kinship system:

1. takamtiwutei means a relative by blood, according to informant number 1.
2. tenalete means a relative by marriage, according to informant number 1.
3. There is no change in the term of address for a consanguineous relative following the death of the connecting relative.
4. A term of affinity is discontinued following the death of the connecting relative.
5. A mn married his dead b w without further payment. He could force her to marry him against her will. She could marry no other without his permission. Marriage to the dead w b d in lieu of the dead w ss was common.
6. Xc marriage was not practiced.
7. dadatcadutei, said to mean "paying in advance," or more properly "exchanging presents in advance," was a custom practiced by two friendly families who proposed that their ch marry. The presents were made reciprocally during the minority of the ch until the marriage was consummated. Ch thus pledged by their p might marry no others.

## ATSUGEWI

I am indebted to Dr. Roland B. Dixon for the following list of Atsugewi terms.

*Parent Class*

tata. F.  
teitei. M.

hewiritsa. S.  
teustik. D.

*Grandparent Class*

apun. F f.  
amun. F m.  
aqon. M f.

teuwa. M m.  
apun. Geh. From Achomawi analogy this is perhaps the specific designation for mn s ch and not for gch in general.

*Sibling Class*

pupa. O b.  
romikeni. O ss.  
nipstir. B.

haiyau. Y b.  
t'ida. Y ss.

*Uncle Class*

nipstir. F b.  
petcir. F ss.  
tsinii. M b.

mida. M ss.  
nipstir. Ss ch.

*Cousin Class*

tokhopi. C.

*Parent-in-law Class*

mipswur. Pl.



## YANA

The kinship terminologies of two of the four Yana dialects, Northern Yana and Yahí, have been exhaustively analyzed and discussed by Dr. Edward Sapir in a paper entitled "Yana Terms of Relationship."<sup>17</sup>

## LUTUAMI

The Lutuami terms were obtained at Klamath Agency, Oregon, and are in the Klamath dialect. Undoubtedly Modoc terms are identical or closely similar, for the dialects are said to be scarcely distinguishable.<sup>18</sup> In any event, the data obtained have been plotted in the Modoc area in the maps of this paper. Four informants were interviewed.

The terms of the Klamath kinship system were listed by the late Albert Samuel Gatschet in his "Dictionary of the Klamath Language."<sup>19</sup> The Klamath kinship system is remarkable for the number of terms employed. It designates by special terms collateral and marriage relatives who in most Californian languages are included respectively with lineal and blood relatives. Self-reciprocal terms are exceedingly common.

*Parent Class*

p'ticap. F.  
p'gicap. M.

vunak. S.  
peip. D.

*Grandparent Class*

It is of interest to note that the Lutuami regard the gp sb not as such but as the p u or a. For the junior generation throughout the gp class I obtained terms with the diminutive suffix -pak. Gatschet, however, gives the terms for the junior generation without such suffix. My informants stated that for young gch it was added, but for adult gch it was omitted. I am omitting it in the following list.

p'lugcip. F f, mn s ch.

p'gacip. M f, mn d ch.

p'tewip. F m, wm s ch.

p'kolip. M m, wm d ch.

papakc. Gf b, mn b gch.

p'lulucip. Gf ss, wm b gch.

p'kuyip. Gm b, mn ss gch. Gatschet gives the term kukui for "m u."

p'ligip. Gm, ss, wm ss gch.

wawigc. Ggp (*fide* Gatschet). For this term I obtained only the meanings "m gm" and "wm gd ch."

wawigap. Ggch (*fide* Gatschet).

p'tcoptcolip. F gm, wm gs ch. The meanings of this term are included in those of the two just above. I obtained only the two terms for ggm, and none for ggf. Informants stated that relationship ceased to be reckoned beyond this generation.

<sup>17</sup> Present series, XIII, 153-173, 1918.

<sup>18</sup> S. A. Barrett, *The Material Culture of the Klamath Lake and Modoc Indians of Northeastern California and Southern Oregon*, present series, v, 241, 1910.

<sup>19</sup> *The Klamath Indians of Southwestern Oregon*, Contr. N. A. Ethnol., II, pt. 2, 1890.

*Sibling Class*

- \*txeunap. Mn o b.  
 \*paanip. Wm o b. Gatschet gives also the meaning "mn o ss."  
 \*p'talip. Wm o ss.  
 Half sb are embraced by the sb terms.
- \*tupakcip. Mn ss.  
 \*tapyap. Y b, wm y ss.

*Uncle Class*

- p'ceyip. F b. Gatschet's information concerning the use of this term is conflicting. In one place he gives the meaning "f b" without qualification. In another he gives "mn f o or y b" and "wm f y b." "Wm f o b" he places under p'lukutcip, which also designates the m b.
- p'kotcip. F ss, wm b ch.  
 p'lukutcip. M b. According to Gatschet, also wm f o b.  
 p'cakip. M ss.
- paktic. Mn b ch.  
 patexalip. Mn ss ch.  
 makokap. Wm ss ch.

*Cousin Class*

- \*txeunap. Mn o  $\sigma$  c (first, second, *et ad infinitum*).  
 \*paanip. Wm o  $\sigma$  c (first, second, *et ad infinitum*).  
 \*p'talip. Wm o  $\varphi$  c (first, second, *et ad infinitum*). Gatschet renders this as "f b d," a meaning which he also assigns to the term p'nanip, which I did not obtain. He gives a second meaning for p'nanip: "o  $\varphi$  c, called so by a y  $\varphi$  c (p'talip)." Here we see yet another meaning for p'talip, quite the opposite of that above.
- \*tupakcip. Mn  $\varphi$  c (first, second, *et ad infinitum*).  
 \*tapyap. Y  $\sigma$  c, wm y  $\varphi$  c.  
 pomteip. C (first, second, *et ad infinitum*). Gatschet limits the meaning of this term to " $\sigma$  c" and "second c who are the s of  $\sigma$  first c." Gatschet gives two more terms for c which I did not obtain: p'katchip ( $\varphi$  c, d of  $\varphi$  c) and p'tchukap (mn m y b ch). There must be a mistake in the case of the last as its normal meaning, as obtained by both Gatschet and myself, is "mn bl."

*Step-relation Class*

- \*koelakc. Stf, mn stch.  
 Stsb are identified with sb.
- \*p'cacip. Stm, wm stch.

*Spouses of Uncles and Aunts*

- \*p'cacip. F b w, h b ch.  
 pausip. F ss h, w b ch.  
 \*koelakc. M ss h, w ss ch.
- p'gumxip. M b w, h ss ch. Gatschet limits the meaning of this term to "m o b w" and "h y ss ch."

*Spouse Class*

- hiwawc. H.  
 wapakc. Earlier cw.  
 kapakc. Later cw.
- cnawedc. W. In the closely related Modoc dialect, the h is often referred to as satcakiyetis (said to mean "the one who sits near me"), and either the h or the w as satctawis (said to mean "the one sitting in the sun").

*Parent-in-law Class*

kocpake. Mn pl.	p'kecip. Sl.
p'tutxap. Wm pl.	p'tutap. Dl.
hucapxap. Wm ml. Rare and not listed by Gatschet.	

*Sibling-in-law Class*

p'tcukap. Mn bl.	mulgap. Mn ssl, wm bl.
palamip. Wm ssl.	p'tcikap. W ss h, h b w.

*Child's Parent-in-law*

As usual in Californian languages, this relationship is designated by a special term, *ceplugict*.

The following brief notes concern terms of affinity. The terms for pl and chl take the suffix *-gewitk* (said to mean "used to be") following the death of the connecting relative. This applies only to reference and not to address, which is unaffected by death of the connecting relative. Divorce brings about a cessation of use of the terms.

Gatschet lists special terms for the m "of an infant just deceased" and for the m "who has lost two or more ch by death," but does not make clear whether they are terms of address or only of reference.<sup>20</sup>

## MAIDU

## NORTHWESTERN MAIDU OF THE PLAINS

This system was secured from three informants at Chico, Butte county.

*Parent Class*

kuli. F.	kole. Ch.
konti. M.	

In reference the sex of a child may be designated by prefixing *yepi* (♂) or *külen* (♀) to the term for ch.

*Grandparent Class*

a. F f, mn s ch.	pa. M f, mn d ch.
saka. F m, wm s ch.	kesi. M m, wm d ch.
	kusto. Ggp, ggch.

*Sibling Class*

*e. O b, o/b.	*tu. Y b, y/b.
*eti. O ss, o/ss.	*ka. Y ss, y/ss.

*Uncle Class*

*kumi. F b, f ♂ c.	kami. B ch, mn ss ch, ♂ c ch, mn ♀ c ch.
*kati. F ss, f ♀ c.	*bono. Wm ss ch, wm ♀ c ch.
toiti. M b, m ♂ c.	*de. M ss, m ♀ c.

<sup>20</sup> Dictionary of the Klamath Language, The Klamath Indians of South-western Oregon, Contr. N. A. Ethnol., II, pt. 2, 608, 1890.

*Cousin Class*

\*e. O ♂ //c.  
 \*eti. O ♀ //c.  
 posi. Xc.

\*tu. Y ♂ //c.  
 \*ka. Y ♀ //c.

*Step-relation Class*

\*kumi. Stf.  
 \*de. Stm.

\*dampa. Mn stch.  
 \*bono. Wm stch.

Stsb are designated by sb terms.

*Spouses of Uncles and Aunts*

\*de. F b w.  
 \*kumi. P ss h.  
 \*kati. M b w.

\*bono. H b ch.  
 \*dampa. W sb ch, h ss ch.

*Spouse Class*

yepi. H.

kule. W.

*Parent-in-law Class*

kanoñko. Fl.  
 esuñko. Ml.

yelama. Sl, chl b.  
 yelankule. Dl, chl, ss.

*Grandparent-in-law Class*

The relatives of this class are merged in the pl class.

*Sibling-in-law Class*

kedi. Mn bl.  
 yaci. Mn ssl, wm bl.  
 \*eti. H b w o than speaker.  
 \*ka. H b w y than speaker.

küli. Wm ssl.  
 kana. W ss h. B terms are also applied.  
 A w ss h o than speaker is called e, one  
 y than the speaker tu. The term kana  
 is said to mean "friend."

*Child's Parent-in-law*

No special term was secured. Informants gave the four terms of the pl class, but did not make clear when a pl term and when a chl term should be applied.

## NORTHWESTERN MAIDU OF THE MOUNTAINS

Four informants are responsible for the following kinship system which was obtained at Mooretown in the mountains of Butte county.

*Parent Class*

kuli. F.  
 ne. M.

kole. Ch.

*Grandparent Class*

aam. F f, mn s ch.  
 sakam. F m, wm s ch.  
 pa. M f.  
 to. M m.

pe. D ch.  
 \*ganam. Ggf, ggs.  
 \*guse. Ggm, ggd.

*Sibling Class*

\*e. O b, o/b.  
 \*etim. O ss, o/ss.

\*tüni. Y b, y/b.  
 \*gam. Y ss, y/ss.

*Uncle Class*

\*yam. F b, f ♂ c. Kuli, the term  
 for f, is also used.

\*katim. F ss, f ♀ c.

\*ka. M b, m ♂ c.

\*de. M ss, m ♀ c.

\*basam. Mn b s, m ♂ c s.

\*po. Mn b d, mn ♂ c d, wm ss d, wm ♀  
 c d.

\*kamim. Wm b ch, wm ♂ c ch, mn ss ch,  
 mn ss ch, mn ♀ c ch.

\*bono. Wm ss s, wm ♀ c s.

*Cousin Class*

\*e. O ♂ //c.

\*etim. O ♀ //c.

posim. O xc.

\*tüni. Y ♂ //c.

\*gam. Y ♀ //c.

kesim. Y xc.

Ch of c of like sex, whether x or //, call each other by the same terms as sb.  
 The ch of c of unlike sex, whether x or //, call each other by xc terms according  
 to their relative ages.

*Step-relation Class*

\*yam. Stf.

\*de. Stm.

\*basam. Mn sts.

\*bono. Wm sts.

\*po. Std.

Stsb are not differentiated from sb.

*Spouses of Uncles and Aunts*

\*de. F b w.

\*ka. F ss h.

\*katim. M b w.

\*yam. M ss h.

\*bono. H b s, w ss s.

\*po. H b d, w ss d.

\*kamim. W b ch, h ss ch.

The usual np-ne reciprocals are employed, except that basam, one of the  
 reciprocals of yam, is here replaced by bono in its meaning w ss s.

*Spouse Class*

yepi. H.

\*guse. Cw.

puli. Second sp.

kono. W.

\*ganam. C-h.

*Parent-in-law Class*

kupa. Pl, sb pl.

peti. Sl, chl b.

pene. Dl, chl ss.

*Grandparent-in-law Class*

This class is merged in the gp class, a sp gp becoming a gp, a gch sp a gch.

kedi. Mn bl, mn ♂ cl.                      masi. Mn ssl, mn ♀ cl, wm bl, wm ♂ cl.  
kane. Wm ssl, wm ♀ cl.                    \*ganam. W ss h.  
\*guse. H b w.

A special term, kopo, was procured for this relation.

The Northeastern Maidu relationship terms were obtained from a single informant, born at Big Meadows and residing at Genessee, Plumas county.

bekûm. F.	tem. S.
nen. M.	bom. D.

sakam.	F f, s ch.	kotom.	M m.
sasam.	F m.	peyim.	D ch.
hopam.	M f.	aam.	Ggp.

*gusum. O b, o /b.	*tönim. Y b, y /b.
*etim. O ss, o /ss.	*kam. Y ss, y /ss.
*samweem. Sb, /sb.	

\*kusem. F b.  
\*katim. F ss.  
\*bononum. M b.  
\*bebem. M ss.  
\*kamim. Np, nc, c ch.

*gusum. O ♂ //c.	*tönim. Y ♂ //c.
*etim. O ♀ //c.	*kam. Y ♀ //c.
posim. Xc.	

*küsem.	Stf.	*kamim.	Stch.
*bebem.	Stm.		
Stsb are merged in sb.			

\*bebem. F b w.  
 \*bononum. F ss h.  
 \*katim. M b w.  
 \*küsem. M ss h.  
 \*kamim. Sp np or nc.

*Spouse Class*

yepim. H.  
kulem. W.

kusem. Csp.

*Parent-in-law Class*

kupam. Fl, sb fl.

penem. H m, ss h m, dl, chl ss.

petim. W m, b w m, sl, chl b.

The identification of w m with sl is substantiated by a system from Belden, Plumas county, not here presented.

*Sibling-in-law Class*

kedem. Mn bl, mn ♂, cl.  
epem. Wm ssl, wm ♀ cl.

masim. Mn ssl, mn ♀ cl, wm bl, wm ♂ cl.  
\*samweem. W ss h, h bw.

*Child's Parent-in-law*

A special term, kopom, found also among the mountain Northwestern Maidu and the Southern Maidu, is employed for this relation.

A female relative, addressed by the same term as a ♂ relative, has the word küle added to the usual term when it is used in reference.

## SOUTHERN MAIDU

The Southern Maidu terms of relationship presented in the following pages were obtained from two informants at Colfax, Placer county.

*Parent Class*

de. F.  
na. M.  
te. S.  
po. D.

ilai. Ch. This term is employed as a substitute for the terms for s and d. It seems to be identical with the Southern Wintun term ilai (ch).

*Grandparent Class*

aai. F f, mn s ch.  
saka. F m, wm s ch.  
opa. M f.  
\*e. Ggf.  
\*eti. Ggm.

koto. M m.  
pe. D ch.  
\*tö. Ggs.  
\*ka. Ggd.

*Sibling and Cousin Classes*

\*e. O b, o/b, o ♂ c.  
\*eti. O ss, o/ss, o ♀ c.

\*tö. Y b, y/b, y ♂ c.  
\*ka. Y ss, y/ss, y ♀ c.

*Uncle Class*

\*kuse. F b.  
\*kati. F ss.  
\*kaka. M b. This term is identical with Miwok  
kaka (m b).

\*omo. M ss.  
\*os. Mn b ch.  
\*kam. Wm b ch, mn ss ch.  
\*kole. Wm ss ch.

*Step-relation Class*

\*kuse. Stf.  
\*omo. Stm.

\*os. Mn stch.  
\*kole. Wm stch.

The stsb are merged in the sb class.

*Spouses of Uncles and Aunts*

\*omo. F b w.  
\*kaka. F ss h.  
\*kati. M b w.  
\*kuse. M ss h.

\*kole. H b ch.  
\*kam. W b ch, h ss ch.  
\*os. W ss ch.

*Spouse Class*

yep. H.  
\*eti. Earlier cw.  
\*e. Earlier c-h.

kule. W.  
\*ka. Later cw.  
\*tö. Later c-h.

*Parent-in-law Class*

peti. Pl, sl, sb pl, chl b. The ml is referred to as petitunas, the h f as petioskon.  
peni. Dl, chl ss.

*Grandparent-in-law Class*

The gp-gch terms are employed.

*Sibling-in-law Class*

kedi. Mn bl.  
epe. Wm ssl.  
\*tö. W ss h y than speaker.  
\*ka. H b w y than speaker.

mas. Mn ssl, w bl.  
\*e. W ss h o than speaker.  
\*eti. H b w o than speaker.

*Child's Parent-in-law*

This relation is designated by the term kopo, which is exclusive in meaning.

## WASHO

The terms of the Washo kinship system have been published by Dr. Kroeber in his "California Kinship Systems."<sup>21</sup>

<sup>21</sup> Present series, XII, 362, 1917.



## SHOSHONEAN

## NORTHERN PAIUTE

This kinship system has been recorded by Dr. Kroeber in his "California Kinship Systems."<sup>22</sup>

## MONO

Three fairly complete Mono systems were obtained, one from Bridgeport, Mono county, a second from Bishop, Inyo county, and a third from North Fork, Madera county. These I have termed respectively Northeastern, Southeastern, and Western, although I should say more correctly northern Eastern and southern Eastern, for the two belong to one dialectic group, Eastern Mono. The Bishop and North Fork systems are quite similar even though they are from different dialectic divisions, while the Bridgeport system is rather dissimilar, resembling more closely Northern Paiute than Bishop Mono. The line of demarcation between the Eastern and Western dialects runs along the crest of the Sierra Nevada. A fourth fragmentary system was obtained at Benton, Mono county, to the north of Bishop. The data include only blood relatives, excepting gp and gch. Two of the terms, haiyi and bidu<sup>u</sup>, are typical of the Bridgeport region. Otherwise they conform to the Bishop type.

## NORTHEASTERN MONO

The possessive prefix i- (my) with which the terms were obtained is omitted in the list.

*Parent Class*

na<sup>a</sup>. F.  
bisi<sup>a</sup>. M.

tuwa. S.  
vāde. D.

*Grandparent Class*

gunu'. F f, mn s ch.  
hudji. F m, wm s ch.  
hubigunu. Gf f, mn s gch.  
hubihudji. M f m, wm s d ch.

toko<sup>a</sup>. M f, mn d ch.  
mu<sup>a</sup>. M m, wm d ch.  
hubitoko. M m f, mn d d ch.  
hubi<sup>i</sup>. M m m, wm d d ch.

*Sibling and Cousin Classes*

vābi<sup>i</sup>. O b, o ♂ c.  
wane<sup>a</sup>. Y b, y ♂ c.

hāme'. O ss, o ♀ c.  
buni<sup>i</sup>. Y ss, y ♀ c.

*Uncle Class*

\*haiyi. F b.  
\*bawha. F ss.  
\*atsi. M b.  
\*bidu<sup>u</sup>. M ss.

\*husa. Mn b ch.  
\*adādsi. Wm b ch.  
\*nanawa'. Mn ss ch.  
\*mido<sup>a</sup>. Wm ss ch.

<sup>22</sup> Present series, XII, 358, 1917.

*Spouses of Uncles and Aunts*

*bidu <sup>a</sup> . F b w.	*mido <sup>o</sup> . H b ch.
*atsi. F ss h.	*nanawa'. W b ch.
*bawha. M b w.	*adädsi. H ss ch.
*haiyi. M ss h.	*husa. W ss ch.

*Spouse Class*

gume. H.	nodiwa'. W.
bua. Cw.	

*Parent-in-law Class*

yahi'. Pl.	tukonya. Sl.
	kunupbiye. Dl.

*Sibling-in-law Class*

arä'dohi. Mn bl.	osanobiye. Mn ssl.
nenaie'. Wm ss h.	kumawana. H b.
waisi. Wm ssl.	wöhö. W ss h, h b w. A substitute for this term was rendered as tikabwaha.

*Child's Parent-in-law*

This relation is denoted by a special term, daiyi.

## SOUTHEASTERN MONO

The data for this kinship system were obtained from five informants at Bishop, Inyo county. Attached to the terms was the possessive prefix i- (my), which is omitted in the list.

*Parent Class*

nawa. F.	*du <sup>a</sup> . S.
*vi <sup>o</sup> . M.	*vädi. D.

*Grandparent Class*

gunu. F f, mn s ch, paternal gp b, mn sb s ch.	hutsi. F m, wm s ch, paternal gp ss, wm sb s ch.
toko. M f, mn d ch, maternal gp b, mn sb d ch.	mu <sup>a</sup> . M m, wm d ch, maternal gp ss, wm sb d ch.
so <sup>o</sup> . Ggp, ggeh.	

*Sibling Class*

*väbi. O b.	*waña. Y b.
*hama. O ss.	*buni. Y ss.
*sau. Wm b, mn ss.	

*Uncle Class*

- \*nauwatsi, natakua, or rarely haiyi. F b.      \*du<sup>a</sup>. Mn b s, wm ss s. For the latter  
 \*bawha. F ss.      meaning datsaana is also used.  
 \*bu<sup>u</sup>. M b.      \*vädi or datsaana. Mn b d, wm ss d.  
 \*bidu<sup>u</sup>. M ss.      \*ada<sup>a</sup>. Wm b ch.  
                              \*nahaugwa. Mn ss ch.

*Cousin Class*

- \*sau. Wm ♂ c, mn ♀ c.      \*bua<sup>a</sup>. Wm ♀ c, mn ♂ c.  
 \*väbi. O ♂ c.      \*waña. Y ♂ c.  
 \*hama. O ♀ c.      \*buni. Y ♀ c.

*Step-relation Class*

- \*haiyi. Stf.      \*vietsi. Stm.

*Spouses of Uncles and Aunts*

- \*vi<sup>e</sup>, vietsi, nahubi<sup>i</sup>, or bidu<sup>u</sup> (rare). F b w.      \*du<sup>a</sup> or datsaana. H b s, w ss s.  
 \*bu<sup>u</sup>. F ss h.      \*vädi or datsaana. H b d, w ss d.  
 \*bawha. M b w.      \*nahaugwa. W b ch.  
 \*nauwatsi or haiyi (rare). M ss h.      \*ada<sup>a</sup>. H ss ch.

*Spouse Class*

- guma. H.      nodükwa. W.  
 gumamwa. C-h.

*Parent-in-law Class*

- yahi. Pl.      tokona. Sl.  
                              kunupbiye. Dl.

*Sibling-in-law Class*

- yadatohi. Mn bl.      waisi. Wm ssl.  
 husapii. Mn ssl.      husana. Wm bl.  
 \*bua<sup>a</sup> or kaduwia. W ss h.      dubwia or kaduwia. H b w.

*Child's Parent-in-law*

A single term, daiyi, exclusive in meaning, was obtained for this relation.

## WESTERN MONO

Four informants furnished the data presented in the following pages. The information was procured at North Fork, Madera county.

*Parent Class*

- \*nau. F.      \*du<sup>a</sup>. S.  
 \*vi<sup>e</sup>. M.      \*väde. D.

*Grandparent Class*

gunu. F f, mn s ch, paternal gp b, mn sb s ch, f gf, mn gs ch.  
 hutsi. F m, wm s ch, paternal gp ss, wm sb s ch, f gm, wm gs ch.  
 toko. M f, mn d ch, maternal gp b, mn sb d ch, m gf, mn gd ch.  
 mu. M m, wm d ch, maternal gp ss, wm sb d ch, m gm, wm gd ch.

*Sibling and Cousin Classes*

bäv <sup>i</sup> . O b.	wana. Y b.
hama. O ss.	bun <sup>i</sup> . Y ss.
*boso. Mn b, wm ss.	sau. Mn ss, wm b.

These terms apply in like fashion to cousins.

*Uncle Class*

*nau or haiyi (rare). F b.	*du <sup>a</sup> . Mn b s, wm ss s, wm ♀ c s. Husa, the Northeastern Mono term for this relation, is rarely used.
*bawha. F ss.	
*bu. M b.	*vāde. Mn b d, wm ss d, wm ♀ c d.
*vi <sup>e</sup> . M ss.	*ada'. Wm b ch, wm ♂ c ch.
	*nahauk'. Mn ss ch, mn ♀ c ch.

*Step-relation Class*

*nau, haiyi, or husuna. Stf.	*vi <sup>e</sup> or husubi <sup>i</sup> . Stm.
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Stsb are designated by sb terms.

*Spouses of Uncles and Aunts*

*vi <sup>e</sup> . F b w.	*du <sup>a</sup> . H b s, w ss s.
*bu. F ss h.	*vāde. H b d, w ss d.
*bawha. M b w.	*nahauk'. W b ch.
*nau. M ss h.	*ada'. H ss ch.

*Spouse Class*

gu. H.	nodükwe. W.
boso or nanawoho. Csp.	

*Parent-in-law Class*

da <sup>hi</sup> . Pl, pl sb.	tokona. Sl, sb sl.
	wobi. Dl, sb dl.

*Grandparent-in-law Class*

Relatives of this class are merged in the gp class.

*Sibling-in-law Class*

yadato <sup>hi</sup> . Mn bl, mn ♂ cl.	yenipai. Mn ssl, wm bl, mn ♀ cl, wm ♂ cl.
waic <sup>i</sup> . Wm ssl, w ♀ cl.	*boso. W ss h, h b w.

*Child's Parent-in-law*

A unique term, wakaci, differing from that employed by Northeastern and Southeastern Mono, is used.

## KAWAIISU

The terms of the Kawaiisu system are listed in my paper on "Tübatulabal and Kawaiisu Kinship Terms."<sup>23</sup>

## TÜBATULABAL

The Tübatulabal terms of relationship have been presented in a paper entitled "Tübatulabal and Kawaiisu Kinship Terms."<sup>24</sup>

## KITANEMUK

The following fragmentary, unverified Kitanemuk kinship system was obtained on August 27, 1918, at the Indian reservation near Tejon Ranchos, Kern county. The informant was an old Kitanemuk woman.

*Parent Class*

na. F.	maiyin. Ch.
*yür M.	

*Grandparent Class*

kukin. F p.	süstü. M m.
kwadi. M f.	

*Sibling Class*

pat. O b.	pit. Y sb.
kor. O ss.	

*Uncle Class*

kwum. F o b.	*yür. M ss.
makai. F y b.	a'küna. Mn b s.
piyani. F ss.	amsit. Wm b ch.
ta. M b, mn ss s.	

*Cousin Class*

The only information obtained about c is to the effect that the ch of two b employ sb terms, apparently on the basis of the relative ages of their f.

*Spouses of Uncles and Aunts*

The w of f b is denoted by the term \*yür, the designation for m and m ss. The reciprocal for a ♀ was given as masit, and for a ♂ as amsit, the term by which a wm denotes her b ch. No further data were obtained.

*Spouse Class*

wüstühaba. H.	nimehō. W.
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<sup>23</sup> Present series, XII, 229, 1917.

<sup>24</sup> Present series, XII, 221, 1917.

*Parent-in-law Class*

gwasü. Pl.

misona. Sl.

imyat. Dl.

*Sibling-in-law Class*

kuhana. W b, wm sbl.

ana. Mn ss h, mn ssl.

## SERRANO

The data for this kinship system were obtained from two informants at Patton, San Bernardino county, and two at Banning, Riverside county. Possessive prefixes have been excised in the following list.

*Parent Class*

na. F.

maiyn. S.

yu'. M.

suñ. Mn d.

polin. Wm d.

*Grandparent Class*

\*ka'. F p, s ch, f f b, mn b s ch, f m ss,  
wm ss s ch.

\*pründj. Gm b, mn ss gch.

kwat. M f, mn d ch, m f b, mn b d ch.

teur. M m, wm d ch, m m ss, wm ss  
d ch.

\*pindj. Gf ss, wm b gch.

\*krüg. Ggp, ggch.

*Sibling Class*

\*pas. O b, o /b.

\*prit. Y b, y /b.

\*kôr. O ss, o /ss.

\*pit. Y ss, y /ss.

hamut. Sb of opposite sex, /sb of opposite sex.

*Uncle Class*

\*kumu. F o b, mn y b ch.

\*yür. M y ss, m ♀ xc.

\*mak. F y b, f ♂ xc.

\*aka. Mn o b ch, mn ♂ xc ch.

\*pa'. F ss, f ♀ c.

\*ams. Wm b ch, wm ♂ c ch.

\*tad. M b, m ♂ c.

\*ahid. Mn ss ch, mn ♀ c ch.

\*num. M o ss, wm y ss ch.

\*mac. Wm o ss ch, wm ♀ xc ch.

//c of one's p are designated as are the sb of one's p. Reciprocally the ch of a //c are called by the np-nc terms exactly as though their p were a sb. If their p is designated as a sb of like sex, they are classed either as o or y sb ch, according as their p is called o or y sb. Sb terms, however, are applied to //c not according to the relative ages of the c concerned, but according to the relative ages of the connecting p.

The ch of a xc of unlike sex, like the ch of a //c of unlike sex, are called by the usual terms for mn ss ch and wm b ch.

It has been noted above that the f ♂ //c and the m ♀ //c are identified respectively with the f o and y b and with the m o and y ss, and that the reciprocal terms correspond. It is not so with the f ♂ xc or with the m ♀ xc. These are always identified respectively with f y b and m y ss, never with f o b and m o ss. Reciprocally the np and nc are always identified respectively with mn o b ch and wm o ss ch.

*Cousin Class*

*pas. F o b s, m o s s s.	*prit. F y b s, m y s s s.
*kör. F o b d, m o s s d.	*pit. F y b d, m y s s d.
puiyu. Mn ♂ xc.	nokü. Mn ♀ xc, wm xc.

*Step-relation Class*

*mak. Stf.	*aka. Mn stch.
*yür. Stm.	*mac. Wm stch.

*Spouses of Uncles and Aunts*

*num. F o b w. h y b ch.	*mak. M y s s h.
*yür. F y b w.	*mac. H o b ch.
*tad. F s s h.	*ahid. W b ch.
*pa'. M b w.	*ams. H s s ch.
*kumu. M o s s h, w y s s ch.	*aka. W o s s ch.

*Spouse Class*

wetcau. H.	hintuwa. W.
*kör. Earlier cw.	*pit. Later cw.
*nahit. Cw.	

*Parent-in-law Class—Lineal*

In this class and in the sbl class two sets of terms are employed, roughly speaking. One set denotes the relatives before there has been any issue of the marriage which brings about the relation. The other set, which consists of purely descriptive terms, denotes the relatives after there has been an issue of the marriage which brings about the relation. Thus a dl is denoted by a term of the first set before she bears a ch, but after she bears a ch she is denoted by a term of the second set meaning "s ch m." Frequently the term is illogically reciprocated, as in this instance, when the woman addresses her h p as "s ch m" also.

miau'ka*. Wm pl before speaker bears a ch.	*mya <sup>u</sup> k. Dl before she bears a ch.
kakaiyek. Wm pl after speaker bears a ch. The term is illogically applied since it means "s ch m."	kakaiye. Dl after she bears a ch. The term means "s ch m."
*kwa'. Mn fl, mn sl before speaker's d bears a ch.	kwaritanak. Mn sl after speaker's d bears a ch. The term means "mn d ch f."
*teite. Mn ml, wm sl before speaker's d bears a ch.	teuritanak. Wm sl after speaker's d bears a ch. The term means "wm d ch f."

*Parent-in-law Class—Collateral*

*mya <sup>u</sup> k. Mn b dl, wm ss dl.	*pründj. Wm b sl, mn ss sl, w f ss, w m b.
*kwa'. Mn b sl, mn b fl, mn sl b.	
*teite. Wm ss sl, mn b ml, wm sl b.	*ka. Wm ss pl, dl ss.
*pindj. Wm b dl, mn ss dl, h f ss, h m b.	nakui. Mn ss pl, wm b pl, dl b, sl ss.

*Grandparent-in-law Class*

\*krüg. Sp gf, mn gch sp.

\*pindj. Sp gm, wm gch sp.

*Sibling-in-law Class*

an. W b, mn ss h before ss bears a ch.

ahidana. Mn ss h after ss bears a ch. The term means "mn ss ch f."

kuhan. W ss, wm ss h before ss bears a ch, h b mn b w before she bears a ch.

nampena. Wm o ss h after o ss bears a ch.

numana. Wm y ss h after y ss bears a ch. The term means "wm y ss ch f."

akanapoie. Mn o b w after she bears a ch. The term means "mn o b ch m."

kumumpoie. Mn y b w after she bears a ch. The term means "mn y b ch m."

kaka. H ss before speaker (?) bears a ch, wm b w before she bears a ch.

aminyeka. H ss after speaker(?) bears a ch.

amsaiye. Wm b w after she bears a ch. The term means "wm b ch m."

\*nahit. W ss h, h b w.

The sp of c are regarded as the sp of sb.

*Child's Parent-in-law*

No term for this relative was procured, although I suspect that the word nakui (mn ss pl, wm b pl, etc.), from its resemblance to the Cahuilla, Cupeño, and Luiseño terms for this relative, is the proper term.

In Serrano the sbl following the death or divorce of the connecting relative is called pir. The levirate is practiced, but is optional. Marriage to the w ss or to two ss also occurred (see mythological instance, "Clans and Moieties in Southern California," present series, xiv, 185, 1918).

## DESERT CAHUILLA

The list of Desert Cahuilla terms of relationship was secured at Coachella, Riverside county. Four informants were interviewed.

*Parent Class*

na or tata. F.

yü. M.

mailoa. S.

suñama. Mn d.

polin. Wm d.

*Grandparent Class*

ka'. F p, f f b, f m ss.

kwa. M f, m f b.

su'. M m, m m ss.

kux. Gf ss, gm b.

\*piwi. Ggp, ggch.

wala or ñaa. Gggp.

\*pas. Ggggf.

\*kis. Ggggm.

kala. S ch, mn b s ch, wm ss s ch.

kwala. Mn d ch, mn b d ch.

sola. Wm d ch, wm ss d ch.

kuxhum. Wm b gch, mn ss gch.

walama or ñaama. Gggch.

\*yul. Ggggs.

\*nawal. Ggggd.

*Sibling Class*

\*pas. O b, o /b.

\*kis. O ss, o /ss.

\*yul. Y b, y /b.

\*nawal. Y ss, y /ss.



*Uncle Class*

\*kum. F o b, f o ♂ xc.

\*mas. F y b, f y ♂ xc.

\*pa. F ss, f ♀ c.

\*tas. M b, m ♂ c.

\*nes. M o ss, m o ♀ xc.

\*yüs. M y ss, m y ♀ xc.

\*kumu. Mn y b ch, mn y ♂ xc ch.

\*takmai. Mn o b ch, mn o ♂ xc ch.

\*asis. Wm b ch, wm ♂ c ch.

\*mut. Mn ss ch, mn ♀ c ch.

\*nesi. Wm y ss ch, wm y ♀ x ch.

\*mat'i. Wm o ss ch, wm o ♀ xc ch.

The p //c are called by the u-a terms exactly as are the p sb. Whether such a ♂ //c of one's f is identified with f o b or f y b depends upon the sb terms which the father applies to the individual in question, and that in turn depends not upon whether f or his c in question is o but upon which of their connecting p (sb of like sex) is o. A similar scheme applies to the //c of like sex of one's m. F ♀ //c, whether o or y, is of course equated to f ss and m ♂ //c, whether o or y, to m b. The correlative np-ne terms apply as reciprocals.

The p xc are designated as u and a on a different basis from the p //c. If the individual, say f ♂ xc, is actually o than f, then he is identified with f o b regardless of the relative ages of his and f connecting p. In other words, the relative ages of the p and the p xc are the determining factors. This is a different principle from that displayed in the classification of one's p //c, and may be due to the fact that xc terms take no cognizance of relative age.

*Cousin Class*

\*pas. F o b s, m o ss s.

\*kis. F o b d, m' o ss d.

nyúku. Mn ♂ xc.

\*yul. F y b s, m y ss s.

\*nawal. F y b d, m y ss d.

nyukú. Wm ♂ xc, ♀ xc.

*Step-relation Class*

\*mas. Stf.

\*yüs. Stm.

\*takmai. Mn stch.

\*mat'i. Wm stch.

*Spouses of Uncles and Aunts*

\*nes. F o b w.

\*yüs. F y b w.

\*tas. F ss h.

\*pa. M b w.

\*kum. M o ss h.

\*mas. M y ss h.

\*nesi. H y b ch.

\*mat'i. H o b ch.

\*mut. W b ch.

\*asis. H ss ch.

\*kumu. W y ss ch.

\*takmai. W o ss ch.

*Spouse Class*

welisu or nahaso. H.

kinañia. W.

*Parent-in-law Class—Lineal*

\*misik. Dl before she bears a ch, wm pl before the wm bears a ch.

kalahiye. Dl after she bears a ch. The term means "s ch m."

kalahiyek. Wm pl after wm bears a ch.

\*minkiawa. Sl before speaker d bears a ch, mn pl before his w bears a ch.

kwalahena. Mn sl after d bears a ch, mn fl after his w bears a ch. The term means "mn d ch f."

solhena. Wm sl after d bears a ch, mn ml after w bears a ch. The term means "wm d ch f."

*Parent-in-law Class—Collateral*

\*misik. Mn b dl, wm ss dl.

\*minkiawa. Mn b sl, wm ss sl.

kuxa. Wm b chl before issue of the marriage, mn ss chl before issue of the marriage, fl ss before issue of the marriage, ml b before issue of the marriage.

kuxahiye. Wm b dl after issue of the marriage, mn ss dl after issue of the marriage. The term means "wm b gch m" or "mn ss gch m."

kuxahiyek. H m b after speaker bears a ch, h f ss after speaker bears a ch.

kuxahena. Wm b sl after issue of marriage, mn ss sl after issue of marriage. The term means "wm b gch f," or "mn ss gch f."

kuxahenak. W f ss after issue of marriage, w m b after issue of marriage.

\*nakwa. Sb pl, ch sb.

*Grandparent-in-law Class*

\*piwi. Sp gp before issue of marriage, gch sp before issue of marriage.

piwihye. Gs w after issue of marriage.

piwihyek. H gp after issue of marriage.

piwihena. Gd h after issue of marriage.

piwihenak. W gp after issue of marriage.

*Sibling-in-law Class*

Pre-issue and descriptive post-issue terms are employed, the latter applied upon the same principle as similar Serrano terms and with the same unreasoning reciprocity.

kwina. Mn bl before issue of marriage, w ss before issue of marriage, wm ss h before issue of marriage.

mutena. Mn bl after issue of marriage. The term means "mn ss ch f."

matihena. W y ss after issue of marriage, wm o ss h after issue of marriage. The term means "wm o ss ch f."

nesihena. W o ss after issue of marriage, wm y ss h after issue of marriage. The term means "wm y ss ch f."

telma. B w before issue of marriage.

takmaihiye. Mn o b w after issue of marriage. The term means "mn o b ch m."

kumuhiye. Mn y b w after issue of marriage. The term means "mn y b ch m."

telnik. H sb before issue of marriage.

kumuhiyek. H o b after issue of marriage.

takmaihiyek. H y b after issue of marriage.

asiyu'. Wm b w after issue of marriage. The term means "wm b ch m."

asiyet. H ss after issue of marriage.

tokotanyastan or kwina. Wss h, h b w.

*Child's Parent-in-law*

A special term, \*nakwa, also applied to certain collateral pl, is found in this class.

## CUPENO

The Cupeño kinship terms were obtained from members of this tribe residing at Banning, Riverside county.

*Parent Class*

na. F.	polinma. Mn s.
yi. M.	suñama. Mn d.
	naakwa. Wm ch.

*Grandparent Class*

ka'. F p, f f b, f m ss.	kama. S ch, mn b s ch, wm ss s ch.
kwa. M f, m f b.	kwana. Mn d ch, mn b d ch.
sü. M m, m m ss.	süma. Wm d ch, wm ss d ch.
kük. Gf ss, gm b.	kükima. Wm b gch, mn ss gch.
*p <sup>i</sup> yu. Ggp.	piwima. Ggch.
wala. Gggp.	walama. Gggch.
*pasma. Ggggf.	*kanima. Ggggs.
*kisma. Ggggm.	*wahali. Ggggd.

*Sibling Class*

*pasma. O b, o /b.	*kanima. Y b, y /b.
*kisma. O ss, o /ss.	*wahali. Y ss, y /ss.
	kia. Infant sb, infant /sb.

*Uncle Class*

*kum. F o b.	*kumuma. Mn y b ch.
*mas. F y b, f ♂ xc.	*takma. Mn o b ch, mn ♂ xc ch.
*pa'. F ss, f ♀ c.	*asisma. Wm b ch, wm ♂ c ch.
*tas. M b, m ♂ c.	*mutima. Mn ss ch, mn ♀ c ch.
*nas. M o ss.	*nasima. Wm y ss ch.
*yüσμα. M y ss, m ♀ xc.	*matisma. Wm o ss ch, wm ♀ xc ch.

*Cousin Class*

*pasma. F o b s, m o ss s.	*kisma. F o b d, m o ss d.
*kanima. F y b s, m y ss s.	*wahali. F y b d, m y ss d.
mukma. Xc.	

To the ch of //c the normal np-nc terms are applied.

*Step-relation Class*

*mas. Stf.	*takma. Mn stch.
*yüσμα. Stm.	*matisma. Wm stch.

Stsb are merged in sb.

*Spouses of Uncles and Aunts*

*nas. F o b w.	*nasima. H y b ch.
*yüσμα. F y b w.	*matisma. H o b ch.
*tas. F ss h.	*mutima. W b ch.
*pa'. M b w.	*asisma. H ss ch.
*kum. M o ss h.	*kumuma. W y ss ch.
*mas. M y ss h.	*takma. W o ss ch.

*Spouse Class*

kuñ. H.  
nuwika. W.

akiya. Cw.

*Parent-in-law Class*

waswuwit. Wm pl before issue of marriage.  
was. Dl before issue of marriage, mn b dl, wm ss dl.  
minkyuwa. Mn pl, sl before issue of marriage, mn b sl, wm ss sl.  
küpoiya. Dl after issue of marriage.  
küpoiowit. Wm pl after issue of marriage.  
kwamapana. Mn sl after issue of marriage. This term means "mn d ch f."  
sümapana. Wm sl after issue of marriage. This term means "wm d ch f."  
kük. Fl ss before issue of marriage, ml b before issue of marriage.  
kükima. Wm b chl before issue of marriage, mn ss chl before issue of marriage.  
\*nakwa. Sb pl, chl sb.

*Grandparent-in-law Class*

piwimuut. Sp gp.

\*piyu. Gch sp.

*Sibling-in-law Class*

mukwana. Bl before issue of marriage, w b after issue of marriage, w o ss, mn b w before issue of marriage.  
mutimapana. Mn ss h after issue of marriage. The term means "mn ss ch f."  
kikia. W y ss.  
matismapana. Wm o ss h after issue of marriage. The term means "wm o ss ch f."  
nasimapana. Wm y ss h after issue of marriage. The term means "wm y ss ch f."  
kumpoiye. Mn y b w after issue of marriage. The term means "mn y b ch m."  
takmaipoiye. Mn o b w after issue of marriage. The term means "mn o b ch m."  
kumpoiyewit. H o b after issue of marriage.  
takmaipoiyewit. H y b after issue of marriage.  
tölma. Wm ssl before issue of marriage.  
spaiyü. Wm ssl after issue of marriage.  
akiya. W ss h, h b w.

*Child's Parent-in-law*

The term \*nakwa for this relative also denotes the sb pl and the chl sb.

## LUISEÑO

The Luiseño kinship system procured at San Jacinto, Riverside county, is almost identical with that obtained by Messrs. Sparkman and Kroeber in western Luiseño territory.<sup>25</sup> The San Jacinto system differs slightly in not employing the diminutive suffix for gch.

Terms of affinity are not changed following the divorce of the connecting relative. Following the death of the connecting relative, only the term for mn bl is changed. The word piha is then employed. Luiseño does not employ two sets of terms, pre-issue and post-issue, for relatives by affinity. The Luiseño lack the ml taboo.

The following data supplement those presented by Dr. Kroeber.

<sup>25</sup> A. L. Kroeber, California Kinship Systems, present series, XII, 348, 1917.

*Uncle Class*

kmũ. F o ♂ xc.	kmũmai. M n y ♂ xc ch.
mac. F y ♂ xc.	maĩmai. M n o ♂ xc ch.
*pamai. F ♀ xc.	*alĩmai. W m ♂ xc ch.
*tac. M ♂ xc.	*mela. M n ♀ xc ch.
*noc. M o ♀ xc.	*nocmai. W m y ♀ xc ch.
*yomai. M y ♀ xc.	*kulĩmai. W m o ♀ xc ch.

*Spouses of Uncles and Aunts*

*noc. F o b w.	*nocmai. H y b ch.
*yosmai. F y b w.	*kulĩmai. H o b ch.
*tac. F s s h.	*mela. W b ch.
*pamai. M b w.	*alĩmai. H s s ch.

Through an oversight the terms for the maternal a h were not obtained. They are undoubtedly the terms for f b.

*Parent-in-law Class*

For pl sb of like sex I obtained the usual pl terms, while Dr. Kroeber obtained the term kek, which I obtained only for pl sb of unlike sex, as in Cupeño and Cahuilla.

*Grandparent-in-law Class*

The term for ggp (piwi) denotes also the sp gp and the geh sp.

## JUANENO

The following Juaneño terms are from Dr. Kroeber's "Notes on Shoshonean Dialects of Southern California."<sup>26</sup>

no-na. My f.	no-qā'm. My s.
ne-yo. My m.	ne-cwā'm. My d.
no-pā'c. My o b.	no-pè't. My y b.
no-qè's. My o ss.	ne-pi't. My y ss.
no-piwu. My gf f.	no-tu. My m m.

## GABRIELINO

The following list is taken from Buschmann's sketch of the Kizh (Gabrielino) and Netela (Juaneño) languages.<sup>27</sup>

a-nák, nĩ-nak, a-mak. F.	a-ikok. S.
ā-ok, a-ūkō. M.	aiárok. D.
ni-pēets. B.	ni-pūts. Ss.

<sup>26</sup> Present series, VIII, 249, 1909.

<sup>27</sup> Joh. Carl Ed. Buschmann, Die Sprachen Kizh und Netela von Neu-Californien, Abh. Kgl. Akad. Wiss. (Berlin, 1855), 505-507, 1856.

I obtained the following untrustworthy data from a Gabrielino named José Varojo, at Patton, San Bernardino county:

nina. F.	amaiyin. S.
niyo. M.	nūsuñ. D.
nimam. O b.	nimaʔ. Y b.
nimak. F y b.	hahavin. Y ss.
nukor. F ss.	naairi. F ss s.
aiyor. M m.	hamira. Mn sl.
nikinapara. Sbl, ch sp p.	

#### FERNANDEÑO

In a linguistic paper by Dr. Kroeber<sup>28</sup> are listed two Fernandeno terms: ne-na, my f; ni-ok, my m. These agree closely with Buschmann's Gabrielino listed above.

#### YUMAN

##### YUMA

The Yuma kinship system presented in the following pages was obtained from three informants at the Yuma Indian reservation on the Colorado river in southeastern California.

##### *Parent Class*

ni'ko'. Mn f.	homai. Mn s.
naai. Wm f.	*vetci. Mn d.
entai'. M.	esth'au. Wm ch.

##### *Grandparent Class*

napau. F f.	a'au. S ch.
nemau. F m.	axgo. D ch.
nakwiau. M f.	*akits. Mn sb gch.
nekyu. M m.	akist. Wm sb gs.
*nakits. Gp b.	sekist. Wm sb gd.
*senyukist. Gp ss.	

kiyi. Mn ggf, mn ggs. Both this term and the succeeding one are said to mean "friend."

siyi. Wm ggf, ggm, ggd, wm ggs.

eme emist. Gggp, gggch. The term is said to mean "hair on my leg."

eme kwilyako. Gggp, gggch. The term is said to mean "my toe nails."

##### *Sibling Class*

entsind. O sb.	asutc. Y b.
wiyauvkiau. Paternal/sb.	enyak. Y ss.
	tauv'alv. Maternal/sb.

<sup>28</sup> Notes on Shoshonean Dialects of Southern California, present series, VIII, 251, 1909.

*Uncle Class*

navi. F o b.	avet. Mn y b ch, wm y ss ch.
nikus. F y b.	yats'kyu. Mn o b ch.
napi. F ss.	varapi. Wm b ch.
nukwi. M b.	avan. Mn ss s.
nûsi. M o ss.	sewen. Mn ss d.
nemui. M y ss.	eno. Wm o ss ch.

*Cousin Class*

dhokamik. Mn f b s.	dhopkasiñ. Wm f b ch, mn f b d.
tsitumav. M ss ch.	tsi'kab. Mn ♂ xc.
ilya. Wm xc, mn ♀ xc.	

Second c, who are the ch of first c of like sex, call one another by sb terms. The manner of application of these terms denoting relative age is settled not by the relative ages of the second c concerned, nor of their connecting p, but by the relative ages of their connecting gp, the original pair of sb, be these of like or unlike sex. Thus, in spite of the elaborate first c terminology, all second c who are the offspring of either // or xc of like sex are sb. Third c who are the ch of second c of like sex are similarly designated by sb terms, which likewise in the matter of relative age hark back to the pair of ggp who were the original real sb. This process is continued *ad infinitum* without any recurrence of the peculiar terms for // first c.

Second c who are the ch of first c of unlike sex apply the two xc terms without regard to the relative ages of their connecting p or gp. Similarly do third c, who are the ch of second c of unlike sex.

Thus it is clear that the question of whether two c are xc or //c does not enter into the terminology for their offspring who may be second, third, fourth, or more distant c; but the question of whether the two c are of like or unlike sex does enter into it and determines whether their offspring apply to each other sb or xc terms. If the former, then the matter of terms is settled by the relative ages of the original pair of sb ancestors.

The evidence would seem to indicate that the three peculiar // first c terms are a secondary development, and that originally Yuma, like Cocopa, Kamia, and Diegueño, employed sb terms for //c. From the persistence of the xc terms in all degrees of cousinship, it would seem that they must be of greater antiquity than the specialized //c terms.

Further support for the above hypothesis is to be found in the fact that the p c are identified with the a and u without reference to whether they are xc or //c. F ♂ c, whether x or //, equals f o or y b according to the relative ages of his and f connecting p. The corresponding np-ne reciprocals apply. The same rule holds for m ♀ c. M ♂ c, of course, equals m b and f ♀ c, f ss. Relative age plays no part in the terms for xu and xa.

*Step-relation Class*

*nakits. Stf.	*akits. Mn steh.
*unyi. Stm. *Senyûkist was given by one informant as the term for dead stm. He also stated that it was used as a term of endearment.	*enkunyi. Wm steh.

Stf and mn steh are addressed by terms, which also denote respectively gp b and mn sb geh. The terms which denote stm (unyi) and wm steh (enkunyi)

have a wide range of usage in the class of sp of u and a, in the pl class, in the gpl class, and in the sbl class. Unyi always denotes a ♀ relative by marriage through a connecting blood relative: f w (stm), u w, s w, np w, gs w, and b w. Enkunyi, the reciprocal of unyi, always denotes a wm relative by marriage through her h: H ch (wm stch), h sb ch, h p, h u, h a, h gp, and h sb.

No terms were secured for stsb.

### *Spouses of Uncles and Aunts*

*unyi. U w.	*enkunyi. H np or nc.
*ucu. Mn a h, w np.	*enkwinyawhe'. Wm a h.
*enyawhe'. W nc.	

W np and mn a h are denoted by the self-reciprocal term ucu, which is likewise used for w u and mn nc h, w gf and mn gd h, and mn bl.

W nc and wm a h are denoted by two terms, apparently based on a single stem, which also denotes respectively w a and wm nc h, w gm and wm gd h, w ss and wm ss h. Briefly, then, the first (enyawhe') denotes several of the w ♀ blood relatives except the m and d, the second (enkwinyawhe') a wm ♀ blood relatives' h except the d h.

### *Spouse Class*

nikraak. H.	nyave. W.
takaviku. Cw.	

### *Parent-in-law Class—Lineal.*

noxeau. Mn pl.	kwinhelyau. Sl.
*enkunyi. Wm pl.	*unyi. Dl.

No terms are employed for the chl sb or the sb pl.

### *Parent-in-law Class—Collateral*

*enkunyi. H u, h a.	*unyi. Np w.
*ucu. Mn nc h, w u.	*enkwinyawhe'. Wm nc h.
*enyawhe'. W a.	

Unique terms exist for mn pl and sl. Wm pl and dl are denoted by enkunyi and unyi, the full meanings of which have already been discussed in the step-relation class. In the collateral line these two terms also apply respectively to the h u or a and the np w. The self-reciprocal term ucu used by bl denotes w u and mn nc h. The w a is identified with the w ss and the wm nc h with the wm ss h.

### *Grandparent-in-law Class*

*enkunyi. H gp.	*unyi. Gs w.
*ucu. W gf, mn gd h.	*enkwinyawhe'. Wm gd h.
*enyawhe'. W gm.	

### *Sibling-in-law Class*

*ucu. Mn bl.	*enyawhe'. W ss.
*enkwinyawhe'. Wm ss h.	*enkunyi. H sb.
*unyi. B w, w ss h, h b w.	

Sbl terms apply to /sbl and to cl. For example, a sp ♀ c, either x or //, is a ssl.



*Child's Parent-in-law*

A special term, *uzucütv*, is employed for this relation.

Following the death or divorce of a connecting relative terms of affinity are discontinued. The terms for *p* are not altered following the death of a *sb* of the speaker.

Informants denied the practice of the levirate. The reason given was that the presence of the *b* widow in the family would be a continual reminder of the family's bereavement. Marriage to the *w ss* was practiced, however. The *ml* taboo is not observed.

## MOHAVE

Dr. A. L. Kroeber has published an elaborate description of the Mohave kinship terminology.<sup>29</sup>

## KAMIA

The Kamia kinship system presented herewith was obtained from a single informant, Placidus Aspa, residing on the Yuma Indian reservation, California. The Kamia occupied the Colorado river in Lower California between the Yuma on the north and the Cocopa on the south. In language they are closely related to the southern Diegueño.

*Parent Class*

inal. F.	humai. Mn s.
intal. M.	eptcai. Mn d.
	isau. Wm ch.

*Grandparent Class*

inpau. F f.	inmau. F m.
inkwau. M f.	a'au. S ch.
inkas. M m.	axgau. D ch.
enmus. Gp sb.	amus. Sb gch.
kiyi Ggf, mn ggs.	siyi. Ggm, ggd, wm ggs.

*Sibling Class*

*intcamal. O b, o/b.	*exmal. Y b, y/b.
*intcatcûn. O ss, o/ss.	*esûn. Y ss, y/ss.

*Uncle Class*

enwi. F o b.	wit. Mn y b ch, wm y ss ch.
inkwatskau. F y b.	atskau. Mn o b ch.
enpi. F ss.	epii. Wm b ch.
inkwai. M b.	uwan. Mn ss ch.
ensil. M o ss.	enesau. Wm o ss ch.
enmui. M y ss.	

<sup>29</sup> California Kinship Systems, present series, XII, 340, 1917.

*Cousin Class*

- \*intcamal. F o b s, m o s s s.      \*esûn. F y s s d, m y s s d.  
 \*exmal. F y b s, m y s s s.      iLya. Mn ♂ xc.  
 \*intcateûn. F o b d, m o s s d.      ilya. Mn ♀ xc, wm xc.

Second, third, and fourth c are classified upon the same basis as the corresponding Yuma relatives. The situation is, of course, rendered simpler by the absence, in Kamia, of special terms for //c. Similarly c ch are reckoned as sb ch, as in Yuma, and the usual np-ne and u-a terms are applied.

*Step-relation Class*

- inkate. Stf.      ikate. Mn stch.

*Spouses of Uncles and Aunts*

- \*emun. U w.      \*inwha. Wm a h. From the fact that the remainder of the terms correspond with sbl terms, it would seem that this term ought to be itupam.  
 \*ucu. Mn a h, w sb s.  
 \*inyawha. W sb d.  
 \*inkumun. H sb ch.

*Spouse Class*

- inkwirak. H.      isenak. W.

*Parent-in-law Class*

- emus. Mn pl.      kwinmus. Sl.  
 inkunyai. Wm pl.      \*unyai. Dl.  
 \*enun. Sb dl, wm b sl.      \*inkumun. H u, h m s s.  
 \*itupam. H f s s, w f s s.      \*ucu. Mn sb sl, w u.  
 \*inyawha. Wm s s sl.      \*inwha. W m s s.

There are no terms for sb pl or chl sb.

*Grandparent-in-law Class*

- inkunyai. Wm gpl.      unyai. Gdl.

*Sibling-in-law Class*

- \*ucu. Mn bl.      \*inyawha. W s s.  
 \*itupam. Wm s s h.      \*inkumun. H b.  
 \*emun. Mn b w.      inkunyai. H s s.  
 \*unyai. Wm b w.

In both Yuma and Kamia sbl terms are discontinued following the death of the connecting relative. In neither language are there special terms for f and m following the death of a ch. In accounting for the absence of the levirate, the informant gave the same explanation as did a Yuma informant, viz., that the presence of the b widow was a constant reminder of the deceased.

## COCOPA

The Cocopa dwell upon the banks of the Colorado river in Lower California, south of the Kamia. The Cocopa practice the levirate in case the widow has offspring by the deceased. Marriage to two ss was also practiced. There is no ml taboo. Many of the Cocopa terms have stems in common, but prefixes that vary. These in some cases may indicate sex, juniority, or seniority. On the other hand, they may merely represent first, second, and third persons, or some other grammatical features. This uncertainty introduces a doubtful element into the system. Many terms may be self-reciprocals disguised by the prefixes. The stem -gas, for instance, is very common. Another difficulty is presented by the stems -gas and -kas. Are they two distinct stems or is the initial consonant intermediate between g and k and recorded as both my me?

*Parent Class*

enyiku'. Mn f.  
inyia'. Wm f.  
intca. M.

homa. Mn s.  
episa. Mn d.  
es'au. Wm ch.

*Grandparent Class*

winpa. F f.  
numa. F m.  
inkwo. M f.  
inika. M m.  
\*whinyigas. Gp b.  
enkas. Gp ss.  
kiyi. Mn ggf, mn ggs.

a'au. S s.  
si'au. S d.  
axga. D s.  
si'ga. D d.  
agas. Mn sb gch.  
a'kas. Wm sb gs.  
si'kas. Wm sb gd.  
siyi. Wm ggf, mn ggd, ggm, wm ggch.

*Sibling Class*

\*kûsa. O b, o/b.  
\*hidjisa. O ss, o/ss.

\*inyahul. Y b, y/b.  
\*inyathus. Y ss, y/ss.

*Uncle Class*

whinyiwit. F o b.  
whinyiskau. F y b.  
enyipi. F ss.  
enyikwa. M b.  
enyûsi. M o ss.  
enyimu. M y ss.  
iwit. Mn y b s, wm y ss s.

siwit. Mn y b d, wm y ss d.  
yiskauwa. Mn o b ch.  
haiyapi. Wm b s.  
sipi. Wm b d.  
uwûn. Mn ss s.  
siwûn. Mn ss d.  
inyes'a. Wm o ss ch.

*Cousin Class*

\*kûsa. F o b s, m o ss s.  
\*hidjisa. F o b d, m o ss d.  
iLya. Mn ♂ xc.

\*inyahul. F y b s, m y ss s.  
\*inyathus. F y b d, m y ss d.  
ilya. Mn ♀ xc, wm xc.

Second, third, and fourth c are reckoned as in Yuma and Kamia. The situation is much simpler than in Yuma, as the Cocopa lack the unique //c terms. C ch are called np and nc as are sb ch and on the same plan as in Yuma. The u-a reciprocals apply.

*Step-relation Class*

\*whinyigas. Stf.

\*ugas. Mn sts.

\*unya. Stm.

\*sigas. Mn std.

\*enkunya. Wm stch.

Stsb are denoted by sb terms.

*Spouses of Uncles and Aunts*

\*unya. U w.

\*enkunya. H sb ch.

\*whinyigas. A h.

\*ugas. W sb s.

\*sigas. W sb d.

*Spouse Class*

inkraak. H.

winswai. W.

*Parent-in-law Class—Lineal*

kunyi. W f.

kixka. Sl.

sunyi. W m.

\*unya. Dl.

\*enkunya. Wm pl.

*Parent-in-law Class—Collateral*

\*enkunya. H u, h a.

\*unya. Np w.

\*ucu. Mn nc h, w u.

No terms are applied to the sb pl or to the chl sb, perhaps because of the weak form or absence of the levirate, as in Yuma and Kamia.

*Grandparent-in-law Class*

\*enkunya. H gp.

\*unya. Gs w.

*Sibling-in-law Class*

\*ucu. Mn bl.

witspaam. W ss, wm ss h.

\*enkunya. H sb.

\*unya. B w.

espamáp. Sbl following death of connecting relative.

## SOUTHERN DIEGUENO

The data for this kinship system were obtained from three informants at Campo, San Diego county. In addition a brief list of terms was given me by Dr. T. T. Waterman.

*Parent Class*

intat. F.

homai. Mn s.

inaiL. F.

iptcai. Mn d.

intel. M.

axwen. Wm ch.

*Grandparent Class*

inpau. F f, f p b.

\*intcaitecún. Ggm.

inmau. F m, f p ss.

a'au. S ch, sb s ch.

inkwau. M f, m p b.

axel or axgau. D ch, sb d ch.

inkús. M m, m p ss.

\*sul. Ggs.

\*intcamal. Ggf.

\*súl. Ggd.

*Sibling Class*

*intcamal. O b, o /b.	*sul. Y b, y /b.
*intcaitecûn. O ss, o /ss.	*sûl. Y ss, y /ss.

*Uncle Class*

*iniwi. F o b.	*uwit. Mn y b ch, wm y ss ch.
*inteiku. F y b.	*atskau. Mn o b ch.
*inpi. F ss.	*ipii. Wm b ch.
*inyikwai. M b.	*uwan. Mn ss ch.
*insil. M o ss.	*inesau. Wm o ss ch.
*nemoi. M y ss.	

The ch of c are called np and nc and, of course, the corresponding u-a reciprocals apply.

*Cousin Class*

*intcamal. F o b s, m o ss s.	*sul. F y b s, m y ss s.
*intcaitecûn. F o b d, m o ss d.	*sûl. F y b d, m y ss d.
*iLa. Mn ♂ xc.	ilya. Mn ♀ xc, wm xc.

//c are denoted by sb terms, not according to their relative ages but according to the relative ages of the connecting p. Two special terms denote xc. One applies to mn ♂ xc, the other to mn ♀ xc and wm xc.

Second c denote one another as do first c. If their p are of like sex, they apply sb terms, probably according to the relative ages of the original pair of connecting sb, although this was not ascertained. If their p are of unlike sex, they apply xc terms.

*Step-relation Class*

inkatct. Stf.	˘katct. Mn stch.
*nemoi. Stm.	*inesau. Wm stch.

The stsb equal sb.

*Spouses of Uncles and Aunts*

*insil. F o b w.	*uwit. H y b ch, w y ss ch.
*nemoi. F y b w.	*inesau. H o b ch.
*inyikwai. F ss h.	*uwan. W b ch.
*inpi. M b w.	*ipii. H ss ch.
*iniwi. M o ss h.	*atskau. W o ss ch.
*inteiku. M y ss h.	

*Spouse Class*

inkrarûk. H.	insiny. W.
intcui. H.	inkwiyeL. Cw.

*Parent-in-law Class*

*in*amus. Pl, sb pl.	hokau. Sl, sl sb.
	*amus. Dl, dl sb.

*Grandparent-in-law Class*

*in*amus. Sp gp.	*amus. Gch sp.
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CI are included.

Following the death of the connecting relative relatives-in-law are called *teumap*. No change in terminology follows the divorce of a connecting relative, however. Neither are the terms for *m* and *f* altered following the death of a *ch*. The Southern California Shoshonean custom of employing special terms for relatives-in-law after issue of the marriage is not practiced.

Second c, who are the ch of first c of like sex, are designated by sb terms, while those who are the offspring of c of unlike sex are designated by the term for xc.

*Step-relation Class*

*inteiku. Stf.	*iyateikau. Mn stch.
*nemoi. Stm.	*ilyau or inesau. Wm stch.
*intcamal. O stb.	*esul. Y stb.
*etcûn. O stss.	*esûn. Y stss.

*Spouses of Uncles and Aunts*

*inisil. F o b w.	*uwit. H y b ch, w y ss ch.
*nemoi. F y b w.	*ilyau or inesau. H o b ch.
*inikwai. F ss h.	*uwan. W b ch.
*inikate. M b w.	*akate. H ss ch.
*inuwis. M o ss h.	*iyateikau. W o ss ch.
*inteiku. M y ss h.	

*Spouse Class*

iteui. H.	esiny. W.
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*Parent-in-law Class*

unyi. Mn pl, b pl, mn fl b, mn ml ss.	*ku'kau. Sl, sl sb, mn b sl, wm ss sl.
akunyai. Wm pl, ss pl, wm fl b, wm ml ss.	unyai. Dl, dl sb, mn b dl, wm ss dl.
*in'mus. Fl ss, ml b.	*amus. Wm b chl, mn ss chl.

*Grandparent-in-law Class*

*in'mus. Gpl.	*amus. Gchl.
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*Sibling-in-law Class*

inyiku. Mn bl, mn ssl, wm bl, w ss h.
inyimun. Wm ssl. A ss term is said to be applied to the h b w.

*Child's Parent-in-law*

Child's parent-in-law is denoted by a special term, uhu.

Following the death of the connecting relative a relative-in-law is called emtupule. After a divorce no change is made for a relative-in-law. Neither are the f and m designated by special terms after the death of a ch. The custom of altering terms of affinity after the birth of a ch is not practiced.

## CHUMASH

## OBISPEÑO

The Obispeño kinship terms presented in the following list were obtained by Mr. H. W. Henshaw at San Luis Obispo, and are listed here through the courtesy of the Bureau of American Ethnology.

mí sáppí. My f.	mí súa. My s, my d.
mí teuyu. My m.	mí tisik teiwišnini. My y b.
mí tataklastí. My o b.	mí súyu. My h.
misuh'héh'e. My h.	

## YNEZEÑO

The following Ynezeño terms of relationship were secured by Dr. Kroeber<sup>30</sup> at Santa Ynez, Santa Barbara county. I quote both the roots and the normal forms with "my." The terms in normal form are reduplicated or preceded by other elements.

qò. F.	ma-qòqo. My f.
tuq. M.	ma-k-tūq. My m.
tu'n. S, d.	ma-k-itc-tu'n. My s.
ma. F p.	ma-k-māma. My f p.
ne. M p.	k-nēne. My m p.
ma. Gch.	ma-k-a-ma. My gch.
pe. O b.	ma-k-pēpe. My o b.
is. Y sb.	ma-k-its-is. My y b.
nūc. F b.	k-ā-nūc. My f b.
ta. M b.	k-tāta. My m b.
wa. A.	k-a-wa. My a.
tcūix. Wm np.	k-tcūix. My np.
	k'-ōna'. My np.
	ma-k-isūyix. My h.
	ma-k-tā'lik. My w.
mus. Pl.	k-mus. My fl.
	ma-k-sūmepēpe. My chl.
to. Sbl.	ma-k-to. My ssl.

## BARBAREÑO

The terms of the p class presented below were secured by Mr. H. W. Henshaw at Santa Barbara, November 10, 1884. They are here presented through the courtesy of the Bureau of American Ethnology.

kó-ko. My f.	k'ta-ní-hu. My s.
kau-ní. My m.	k'cá-i. My d.

<sup>30</sup> The Languages of the Coast of California South of San Francisco, present series, II, 42, 1904.



## ISLAND CHUMASH

The brief list of Island Chumash kinship terms was obtained by Mr. H. W. Henshaw at Los Alamos, Santa Barbara county, on October 30, 1884. It was obtained from a native of Santa Rosa island named Pahilateet, and represents the speech of that island.

u-ká'-ká. My f.	huk-tän'-ä-hu. My s.
ká'-ni. My m.	huk-sa-a'-hi. My d.
k'nän'-nī. My f m.	huk-tän'-ä-hu. My s s.
hu-ka'-mi-u'-li-stö-kö. My o b.	huk-sa-a'-hi. My d s.
hu-ka-mo-te-u'-lu-e-stö-kö. My o ss.	hu-ki'-teitc-stan-i-hu. My y b.
hu-ki'-si-hö'-yö. My h.	hu-kamu'-te-stän'-i-hu. My y ss.
	huk-täl'-i-hik. My w.

## SALINAN: ANTONIANO AND MIGUELEÑO

Dr. John Alden Mason has presented the more or less contradictory data for this now Americanized or Mexicanized people.<sup>31</sup> Dr. Mason has kindly submitted to me his original notes, from which he partly reconstructed the kinship systems of the two main groups, Antoniano and Migueleño. I have not attempted a reconstruction on my own account, as I feel that Dr. Mason's is as good or better than any I can offer. If we knew more of the kinship systems of the neighboring Chumash, Esselen, and Costanoan, another reconstruction might be warranted. Reconstructions by analogy, however, are particularly precarious in California, where the variations in kinship systems are almost infinite.

## ESSELEN

The following brief list of Esselen terms is extracted from Dr. Kroeber's paper on "The Languages of the Coast of California North of San Francisco."<sup>32</sup> He in turn derived the terms from the earlier sources: de la Cuesta, Galiano, la Perouse, and Henshaw.

ahai, maatc. F.	pana. Ch. Given as panna, nicpanna, and mis-
atsia, natsi. M.	panna (s), and tapanna (d). Nic and mis
metce, metxe. Gf.	are possessive pronouns; ta means wm.
miits. B.	aleta. D.
itci. Ss.	tutsu. Nc.
	isikis. Ml.

<sup>31</sup> The Ethnology of the Salinan Indians, present series, x, 169, 1912.

<sup>32</sup> Present series, II, 51-54, 67, 1904.

## COSTANOAN

## SANTA CLARA COSTANOAN

The few terms presented herewith were obtained in 1915 from a charming old lady named Angela, who lived at Pleasanton, Alameda county. Angela was born at San Lorenzo, in the same county. Her mother was a native of that place and her father a Koryak, who visited San Francisco bay on a Russian ship.

*Parent Class*

apa. F.	inic. S.
ana. M.	cinin. D, ch.

*Grandparent Class*

papa. Gf.	tcotcou. Gch.
mele. Gm.	

*Sibling Class*

taka. O b.	tale. Y ss.
tanán. O ss.	

*Uncle Class*

ete. F' b, m b.	añci. F ss.
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*Spouse Class*

mako. H.	hauak. W.
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*Parent-in-law Class*

merci. Fl.	meric. Dl.
uxi. Ml.	

## SANTA CRUZ COSTANOAN

The following kinship terms were recorded by Mr. H. W. Henshaw at Santa Cruz, Santa Cruz county, September 26-29, 1888. Through the kindness of the Bureau of American Ethnology I am enabled to list them here. I have altered the orthography slightly.

*Parent Class*

apnan. F.	inis. S.
anan. M.	

*Grandparent Class*

howo. F f.	meres. S s.
mele. M m.	

*Sibling Class*

taknan. O b.	utek. Y sb.
tanán. O ss.	

*Uncle Class*

etnan. F o b.

ansi. F o ss.

*Spouse Class*

palup. H.

haunan. W.

mako. H.

*Parent-in-law Class*

mako apnan. H f.

pudi. S w.

## MUTSUN

The Mutsun terms of relationship presented herewith have been extracted from Dr. John Alden Mason's paper on 'The Mutsun Dialect of Costanoan Based on the vocabulary of de la Cuesta.'<sup>33</sup> As indicated by the title, we are indebted to Father Felipe Arroyo de la Cuesta, a most earnest and indefatigable member of the order of St. Francis, who a century ago collected a mass of 2884 words, phrases, and sentences from the language of the Mutsun Indians, spoken at his mission of San Juan Bautista, now within the boundaries of San Benito county.

The material is hardly sufficient to definitely show with what other kinship systems the Mutsun is allied.

*Parent Class*

uta. P.

ap.a. F.

ana. M.

mos. S (f speaking to s).

inis. S (f speaking of s).

ka. D (f speaking).

taure, tauro. Ch (m speaking).

sit-num. Baby (m speaking).

*Grandparent Class*

The data as presented below are in the order listed by Dr. Mason from de la Cuesta's manuscript. It seems likely that there were four terms for gp, which, to hazard a guess, may have been employed as follows: papa (f f), ete (m f), teire (f m), mene (m m). Santa Clara Costanoan presents but two terms: papa (gf), mele (gm).

\*ete, et.e. M f.

\*apapat. Gs.

mene. M m.

\*meres, moeres. Gs.

parane. Gm.

papa. M gf.

teire. F m.

*Sibling Class*

taka, tak.a. O b.

tare, tanses (tauses). Y sb. The second word is also

ta, taha. O ss.

said to mean o b.

<sup>33</sup> Present series, XI, 437, 438, 1916.

tictan. Ssl.

## YOKUTS

Six Yokuts systems are herewith presented: Yauelmani, Yaudanchi, Paleuyami, Tachi, Gashowu, Chukchansi. The Paleuyami system is not all that it should be, as it was obtained from a single individual living at Tule River reservation with the Yaudanchi and Yauelmani.

The Yaudanchi use the term *hinasmum* in referring to a dead *gch.* The endings *-sanu*, *-panu*, and *-lanu* on the Tachi terms in the ensuing table are added following the death or divorce of the connecting relative and are said to mean "has been." The changes in Yauelmani and Yaudanchi terms of affinity shown in the following list follow the death, but not the divorce, of the connecting relative.

Term	Yauelmani	Yaudanchi	Paleuyami	Tachi
komoyisi		komoyisi		
uiha	uihutu			
kawaiyisi		kawiyisi		
nahamis	nahamiti	nahamisi	nahamisi	nahamsanu
ontip	onitipi	onitipi		onitpanu
napatim	napitimi	napitimi	napitimi	
onmil	onimili			onimlanu
onmid		onimidi		
nipi	nipiiti			
nipe		nipiyiti		
onpai		unipiyi		
mudmud		mudamuda		
itwap		ituwipi		
kitwinit		kitiwinit		

## PALEUYAMI

The fragmentary kinship system here presented was obtained from a single Paleuyami informant, and a rather poor one at that, at Tule River reservation, Tulare county. As the system has not been checked, too much reliance should not be placed in it. I suspect, also, that where the informant was in doubt as to the proper term in his own language he substituted Yaudanchi or Yauelmani terms.

*Parent Class*

nopop. F.	*a'hel. Ch.
na'hit. M.	*kohotep. S.
	*hatnekata. D.

*Grandparent Class*

hatei. Gf, f m.	enas. Mn gch.
tutu. M m, wm gch.	mokotci. Ggp, ggch.

*Sibling Class*

*nepit. O b.	*niis. Y b.
*naat. O ss.	*noot. Y ss.
*hukoiz. Wm b.	

*Uncle Class*

*komolis. F b.	*a'hel. Mn b ch, wm ss ch.
bauwa. F ss.	*kohotep. Mn b s, wm ss s.
kokwat. M b.	*hatnekata. Mn b d, wm ss d.
*mime. M ss.	*napas. Wm b ch.
	naau. Mn ss ch.

*Cousin Class*

*nepit. O ♂ c.	*niis. Y ♂ c.
*naat. O ♀ c.	*noot. Y ♀ c.
*hukoiz. Wm ♂ c.	

*Spouses of Uncles and Aunts*

*mime. F b w.	*a'hel. H b ch, w ss ch.
uiha. M b w.	*kohotep. H b s, w ss s.
*komolis. M ss h.	*hatnekata. H b d, w ss d.
	*napas. H ss ch.

*Spouse Class*

A term for h (lotem) and one for w (hatne) were procured.

*Parent-in-law Class*

nahamis. Fl.	*napatim. Sl, sb sl.
ontipi. Ml.	onmul. Dl, sb dl.

*Sibling-in-law Class*

onpoi. W sb, h b, mn b w.	*napatim. Ss h.
	itwap. Wm ssl.

*Child's Parent-in-law*

The term (maks) common to both Yokuts and Sierra Miwok was obtained.

## YAUDANCHI

Dr. Kroeber published the Yaudanchi kinship system in his paper on "California Kinship Systems."<sup>34</sup> It remains for me to add any new data I may possess. Four informants were interviewed by me. They were carefully questioned on points of doubt.

*Parent Class*

I procured but a single term for offspring, while Dr. Kroeber obtained three.

\*a'hid. Ch.

*Uncle Class*

I procured the term a'hid not only for ch but also for //np or nc, for which Dr. Kroeber obtained the two terms buchong and ahi. The np-nc terms include the ch of c as well as of sb.

<sup>34</sup> Present series, XII, 352, 1917.

### *Cousin Class*

The sb terms are applied to both // and xc according to relative age.

### *Step-relation Class*

Stf equals f b, stm equals m ss, and stch equals ch or // np-nc. Stsb are merged in sb.

### *Spouses of Uncles and Aunts*

mokoi.	F b w.	*a'hid.	H b ch, w ss ch.
*mudmud.	F ss h.	*nipe.	W b s.
kawaiyis.	M b w.	*onpoi.	W b d.
komoiyis.	M ss h.	napas.	H ss ch.

### *Parent-in-law Class*

Four terms are employed as in English: (1) fl, (2) ml, (3) sl, (4) dl. The term for sl also is applied to the ss h, according to Dr. Kroeber. This seems to be the normal thing in Yokuts kinship systems. My Yaudanchi informants, however, gave a unique term (mudmud) for ss h.

The above four pl terms are extended to collateral relatives as follows: (1) sb fl, (2) sb ml, (3) sb sl and chl b, (4) sb dl and chl ss.

### *Grandparent-in-law Class*

*nipe.	W gf.	*itwap.	Gs w.
*mudmud.	Gd h.	*kitwinit.	H gm.
*onpoi.	W gm, h gf.		

### *Sibling-in-law Class*

Dr. Kroeber gives but four terms. He unites the h ss with the b w in the term itwap, while I procured a special term for h ss. Ss h equals sl in Dr. Kroeber's list. My informants, on the other hand, gave the special term mudmud for this relation. W ss h and h b w are denoted by a term said to mean friend. For the sake of clearness, the sbl terms as I obtained them are listed below.

*nipe.	W b.	*itwap.	B w.
*mudmud.	Ss h.	*kitwinit.	H ss.
*onpoi.	W ss, h b.	notei.	W ss h, h b w.

### *Child's Parent-in-law*

As in other Yokuts, and in Miwok dialects, the term makei is applied to this three-step relative.

## YAUELMANI

Six Yauelmani informants were interviewed at Tule River reservation, Tulare county. Although Dr. Kroeber has treated the Yauelmani kinship system in connection with the Yaudanchi,<sup>35</sup> it seems worth while to present the system as I obtained it, since Dr. Kroeber's presentation is distinctly subsidiary to his Yaudanchi discussion.

*Parent Class*

popo. F (address).	amatci. M (address).
nopop. F (reference).	noom. M (reference).
witcep. Ch.	

*Grandparent Class*

enas. Gf, mn gch.	tuta. Wm d ch.
kamits. M m.	hahetcau. Gggp, gggch. Hahetcau is said to mean
mokotci. Ggp, ggch.	"something which one points out to
bapa. F m, wm s ch.	you, but which you cannot see."

*Sibling Class*

*nipet. O b.	*nees. Y b.
*naat. O ss.	*noot. Y ss.
*hukoz. Wm b, mn ss.	

*Uncle Class*

*komoiyis. F b.	*putcon. Mn b s, wm ss s, mn ♂ c s, wm ♀ c s.
nusus. F ss.	*katcap. Mn b d, wm ss d, mn ♂ c d, wm ♀ c d.
agas. M b.	*napas. Wm b ch, wm ♂ c ch.
*mokoi. M ss.	tcaiya. Mn ss ch, mn ♀ c ch.

*Cousin Class*

*nipet. O ♂ c.	*nees. Y ♂ c.
*naat. O ♀ c.	*noot. Y ♀ c.
*hukoz. Wm ♂ c, mn ♀ c.	

*Step-relation Class*

*komoiyis. Stf.	*putcon. Sts.
*mokoi. Stm.	*katcap. Std.
*nipet. O stb.	*nees. Y stb.
*naat. O stss.	*noot. Y stss.
*hukoz. Wm stb, mn stss.	

*Spouses of Uncles and Aunts*

*mokoi. F b w.	*putcon. H b s, w ss s.
*nipi. W b s.	*katcap. H b d, w ss d.
*onpoi. W b d.	*napatim. F ss h.
uiha. M b w.	*napas. H ss ch.
*komoiyis. M ss h.	

<sup>35</sup> California Kinship Systems, present series, XII, 352, 1917.



*Spouse Class*

polum. H.

moki or yitwasnimhon. W. Moki is said to be a "bad word" as it refers to a wm with whom a man lives temporarily. Yitwasnimhon, on the other hand, is the term for "permanent wife." The distinction may well be the result of Caucasian contact.

*Parent-in-law Class*

nahamis. Fl.  
ontip. Ml.

\*napatim. Sl, sb sl.  
onmil. Dl, sb dl.

*Grandparent-in-law Class*

\*nipi. W gf.

\*onpoi. W gm, h gf, mn gs w (also denoted as itwap).

\*kitwinit. H gm.

\*napatim. Gd h.

\*itwap. Gs w.

*Sibling-in-Law Class*

\*nipi. W b.

\*onpoi. W ss, h b.

\*itwap. B w. Three informants have itwap for mn b w. Three others gave onpoi. The former corresponds with Yaudanchi terminology, the latter with Tachi, Chukchansi, and Gashowu.

\*napatim. Ss h.

\*kitwinit. H ss.

*Child's Parent-in-law*

The ubiquitous Yokuts-Miwok maksí is employed for this relation.

## TACHI

Two Tachi informants are responsible for the following kinship system which was secured at Lemoore, Kings county.

*Parent Class*

poptoi. F.

bapai. M (address).

noom. M (reference).

\*witcep. Ch.

\*putcon. S.

\*katcap. D.

*Grandparent Class*

enas. Gf, gm b, ggf.

kamit. Gm, gf ss, ggm.

\*napas. Gch, sb gch, ggch.

*Sibling Class*

\*nipet. O b.

\*naat. O ss.

\*nees. Y b.

\*noot. Y ss.

*Uncle Class*

\*nitet. F b.

nusus. F ss.

\*agas. M b.

\*niket. M ss.

\*witcep. Mn b ch, wm ss ch.

\*putcon. Mn b s, wm ss s.

\*katcap. Mn b d, wm ss d.

\*napas. Wm b ch.

\*tcaiya. Mn ss ch.

*Cousin Class*

*nipet. O ♂ //c.	*nees. Y ♂ //c.
*naat. O ♀ //c.	*noot. Y ♀ //c.
*hokoiyis. Wm ♂ //c, mn ♀ //c.	*tcime. Mn ♂ //c, wm ♀ //c.
*tcaiya. Mn f ss ch.	*witcep. Wm f ss ch.
*putcon. Wm f ss s.	*katcap. Wm f ss d.
*agas. M b s.	*niket. M b d.

*Step-relation Class*

*nitet. Stf.	witepil. Sts.
*niket. Stm.	katcpil. Std.
*nipet. O stb.	*nees. Y stb.
*naat. O stss.	noot. Y stss.

*Spouses of Uncles and Aunts*

*niket. F b w.	*witecep. H b ch, w ss ch.
*napatim. Mn f ss h.	*putcon. H b s, w ss s.
*anpoi. Wm f ss h, w b d.	*katcap. H b d, w ss d.
*onmil. M b w.	*nipi. W b s.
*nitet. M ss h.	*nahamis. H ss s.
	*ontip. H ss d.

*Spouse Class*

lowit. H.	moki. W.
ponoiyis. Csp.	

*Parent-in-law Class*

*nahamis. Fl.	*napatmanum. Sl.
*ontip. Ml.	*onmil. Dl.
notci. Ml b, fl ss.	tantcai. Mn ss chl, wm b chl.

*Grandparent-in-law Class*

*nipi. W gf.	*napatim. Mn gd h.
*anpoi. W gm, wm gd h, h gf, mn gs w.	*kitw'nit. H gm.
*ituwap. Wm gs w.	

*Sibling-in-law Class*

*nipi. W b.	*napatim. Mn ss h.
*anpoi. Mn ssl, wm bl.	*kitwinit. H ss.
*ituwap. Wm b w.	*tcime. W ss h, h b w.
onmil. Wm f ss s w.	*ontip. Sp m b d.
*napatmanum. Wm f ss d h.	*putcon. W f ss s.
*nitet. M b d h.	*katcap. W f ss d.

Since xc are denoted by u-a and np-ne terms, it follows that their sp and the xc of sp are denoted by terms to correspond. Thus, for example, a wm calls her f ss s as she would her ss s. Hence her h calls this individual as he would his w ss s. The individual reciprocates with the term for m ss h.

*Child's Parent-in-law*

This relation is denoted by the term makei.

## GASHOWU

The Gashowu kinship system was obtained from an informant living in the Sierra Nevada foothills a few miles east of Friant, Fresno county.

The Gashowu possess no taboo against a mn talking with his m b w. A mn may marry his w ss "sometimes," the informant said.

*Parent Class*

*popite or upo. F (address).	ama. M (address).
nupop. F (reference).	noom. M (reference).
*putcon. S.	*katcap. D.

*Grandparent Class*

enas. Gf, ggf.	*napat. Geh, ggch.
kamite. Gm, ggm.	

*Sibling Class*

*nipetc. O b.	*nees. Y b.
*naat. O ss.	*noot. Y ss.

*Uncle Class*

*popite or upo. F b.	*putcon. Mn b s.
nucus. F ss.	*katcap. Mn b d.
*nu'ho. M b.	*napat. Wm b ch.
*niket. M ss.	*naau. Mn ss ch.

*Cousin Class*

*nipetc. O ♂ //c.	*nees. Y ♂ //c.
*naat. O ♀ //c.	*noot. Y ♀ //c.
*nu'ho. M b s, m b s s.	*naau. Mn f ss ch.
*niket. M b d, m b s d.	

M b d ch are denoted by sb terms according as the individual addressed is o or y than the speaker.

*Spouses of Uncles and Aunts*

*niket. F b w.	*nipe. W b s.
napatim. Mn f ss h.	*nahamis. H ss s.
*inpai. Wm f ss h, w b d.	*untip. H ss d.
*unmil. M b w.	*putcon. W ss s.
*popite, upo, or kumoiyic. M ss h.	*katcap. S ss d.

*Spouse Class*

lowit. H.	yiwil. W.
-----------	-----------

*Parent-in-law Class*

*nahamis. Fl.	*napatim. Sl.
*untip. Ml.	*unmil. Dl.

*Sibling-in-law Class*

- |                        |                  |
|------------------------|------------------|
| *nipe. W b.            | kitwinitc. H ss. |
| *napatim. Mn ss h.     | nityu. Wm b w.   |
| *inpai. Mn ssl, wm bl. |                  |

B terms are employed for the w ss h, ss terms for the h b w.

*Child's Parent-in-law*

An exclusive term (maks), employed by Miwok as well as Yokuts groups, denotes this three-step relative.

## CHUKCHANSI

The Chukchansi kinship system was obtained from four informants at Picayune and Oakhurst, Madera county. Unless otherwise stated terms are used in address.

The Chukchansi mn observe the ml taboo and likewise talk but little with the m b w. A similar taboo is in force between a wm and her fl.

*Parent Class*

- |                      |             |
|----------------------|-------------|
| *omis. M (address).  | *nopop. F.  |
| amalis. M (address). | *putcon. S. |
| noom. M (reference). | *katcap. D. |

*Grandparent Class*

- |                         |                          |
|-------------------------|--------------------------|
| enas. Gf, gm b, ggf.    | napas Gch, sb gch, ggch. |
| moksai. Gm, gm ss, ggm. |                          |

*Sibling Class*

- |               |              |
|---------------|--------------|
| *nipetc. O b. | *neec. Y b.  |
| *naat. O ss.  | *noot. Y ss. |

*Uncle Class*

- |                 |                           |
|-----------------|---------------------------|
| *nopop. F b.    | *putcon. Mn b s, wm ss s. |
| nusus. F ss.    | *katcap. Mn b d, wm ss d. |
| *no'ho. M b.    | napas. Wm b ch.           |
| *omis. M o ss.  | *na'au. Mn ss ch.         |
| *niket. M y ss. |                           |

*Cousin Class*

- |                     |                 |
|---------------------|-----------------|
| *nipetc. O ♂ //c.   | *neec. Y ♂ //c. |
| *naat. O ♀ //c.     | *noot. Y ♀ //c. |
| *na'au. Mn f ss ch. | *no'ho. M b s.  |
| *putcon. Wm f ss s. | *niket. M b d.  |
| *katcap. Wm f ss d. |                 |

*First Cousins Once Removed*

- |                                  |                                |
|----------------------------------|--------------------------------|
| *no'ho. M b s s.                 | *niket. M b s d.               |
| *nipetc. M b d s o than speaker. | *neec. M b d s y than speaker. |
| *naat. M b d d o than speaker.   | *noot. M b d d y than speaker. |

*Step-relation Class*

\*nopol. Stf.

\*niket. Stm.

*Spouses of Uncles and Aunts*

\*omis. F b w o than m.

\*putcon. H b s, w ss s.

\*niket. F b w y than m.

\*katcap. H b d, w ss d.

\*napatim. Mn f ss h.

\*nipil. W b s.

\*inpai. Wm f ss h, w b d.

\*nahamis. H ss s.

\*onmil. M b w.

\*ontip. H ss d.

\*nopol. M ss h.

*Spouse Class*

lowit. H.

moki. W.

\*yetnim. Csp.

*Parent-in-law Class*

nahamis. Fl.

\*napatim. Sl.

\*ontip. Ml.

\*onmil. Dl.

gimetc. Sp m b, mn ss ch sp.

\*inpai. W f ss, wm b d h.

\*ontimtil. H f ss.

\*ituwap. Wm b s w.

*Grandparent-in-law Class*

\*yetnim. W gf, mn gd h.

\*inpai. W gm, wm gd h, h gf, mn gs w.

\*ontimtil. H gm.

\*ituwap. Wm gs w.

*Sibling-in-law Class*

\*nipil. W b.

\*katcap. W f ss d.

\*napatim. Mn ss h.

\*nopol. M b d h.

\*inpai. Mn ssl, wm bl.

\*onmil. M b s w.

\*ontimtil. H ss.

\*nahamis. H f ss s.

\*ituwap. Wm b w.

\*ontip. H f ss d.

\*putcon. W f ss s.

*Child's Parent-in-law*

The term (maksi) for this relative is exclusive in application so far as my data go.

## NORTHERN VALLEY YOKUTS

From Dr. Kroeber's notebooks I have extracted four kinship terms of the extinct Northern Valley Yokuts. These are the terms nopol (f), i'ta (m), and yukul (ch) employed by the Yachikamni tribe, formerly on the site of Stockton; and the term dopo (f) employed by the tribe which dwelt near Knights Ferry, Stanislaus county.

## MIWOK

## SOUTHERN MIWOK

Two informants were interviewed. Frank Georgely gave me the system employed by the Southern Miwok of the vicinity of Yosemite valley, Frank Bishop and also Frank Georgely, the system by the Pohonichi Miwok, the southernmost of the Southern Miwok, living in Madera county. The Yosemite system resembles that employed by the Central Miwok of Groveland, Tuolumne county. I am therefore presenting the Pohonichi system, which is somewhat divergent, and append notes on the differences between it and the Yosemite system.

*Parent Class*

*üpi. F.	*kotco. S.
*ami. M.	*tune. D.

*Grandparent Class*

*papa. Gf, gp b, ggf.	atce. Gch, sb gch, ggch.
*ama. Gm, ggm.	

*Sibling Class*

*tatci. O b.	*iti. Y b.
*tete. O ss.	*üta. Y ss.

Üta, with all the Sierra Nevada Miwok (Northern, Central, and Southern) except the Pohonichi, denotes m.

*Uncle Class*

*üpi. F b.	*kaka. M b.
*ami. M o ss.	*kotco. Mn b s, wm ss s.
*anisü. M y ss.	*tune. Mn b d, wm ss d.
*ene. F ss.	*üpsa. Wm b ch, mn ss ch.

*Parallel Cousins*

*tatci. O ♂ //c.	*iti. Y ♂ //c.
*tete. O ♀ //c.	*üta. Y ♀ //c.

*Cross-cousins*

*anisü. M b d.	*kotco. Wm f ss s.
*kaka. M b s.	*tune. Wm f ss d.
	*üpsa. Mn f ss ch.

*Cross-cousins Once Removed*

*kaka. M b s s.	*anisü. M b s d.
-----------------	------------------

Xc once removed, i.e., the ch of one's xc, are denoted by the terms applied to the ch of relatives denoted by the same terms as xc. Thus if the xc is denoted by the term for xnp-nc, üpsa, then the xc ch will be called gch. The m b d ch are denoted by sb terms.

*Step-relation Class*

haiyi. Stf.	*ami. Stm o than m.
	*anisü. Stm y than m.

*Spouses of Uncles and Aunts*

*üpü. M ss h.	*kotco. H b s, w ss s.
*ami. F b w o than m.	*tune. H b d, w ss d.
*anisü. F b w y than m.	*wokoli. W b ch.
*kawu. F ss h.	*kimetcumu. H ss ch.
*kumatsa. M b w.	

*Spouse Class*

maña. H.	oha. W.
*moe. Cw, ch.	

*Parent-in-law Class*

memu. Pl.	saliba. Sl.
	oiyame. Dl.

*Grandparent-in-law Class*

*papa. Sp gf.	*ama. Sp gm.
---------------	--------------

*Sibling-in-law Class*

*wokoli. W sb, h b.	*kawu. Ss h.
olo. B w.	kûsûnu. H ss.
*moe. W ss h. In case the men in question are related by blood, the term of consanguinity takes precedence over this term.	

*Cross-cousins-in-law*

*kumatsa. M b s w.	*kimetcumu. H f ss ch.
--------------------	------------------------

*Child's Parent-in-law*

This relative is designated by the usual Miwok-Yokuts term maksî.

The following terms are employed by the Yosemite Miwok and not by the Pöhonichi Miwok of Madera county.

*Parent Class*

üta. M.	*añsi. S.
---------	-----------

*Sibling Class*

*ate. Y sb.
-------------

*Uncle Class*

*añsi. Mn b s, wm ss s.
-------------------------

*Cousin Class*

*ate. Y //c.	*añsi. Wm f ss s.
--------------	-------------------

*Spouses of Uncles and Aunts*

\*añsi. H b s, w ss s.

haiyi. M ss h.

saliba. H ss s.

oiyame. H ss d.

*Parent-in-law Class*

hewa. Pl.

*Sibling-in-law Class*

kolina. H ss.

Not only the ml taboo prevails among the Southern Miwok but also a taboo between the m b w and the h ss s, which latter is designated by the term for sl, thus indicating xc marriage (i.e., of a mn to his m b d, anisü). Such marriages occurred, although the natives seemed to prefer to marry a ♀ xc (anisü) more remote than a first c.

## CENTRAL MIWOK

The complete list of Central Sierra Miwok<sup>36</sup> terms has already been published and, to some extent, discussed.

## NORTHERN MIWOK

The data for this kinship system were procured from two informants.

*Parent Class*

\*üpü. F.

üta. M.

\*esa. Ch (address).

añsi. S (reference).

tune. D (reference).

*Grandparent Class*

papa. Gf, gp b, ggf.

ete. F m, f p ss, f gm.

ama. M m, m p ss, m gm.

atce. Gch, sb gch, ggch.

*Sibling Class*

\*tatei. O b, o/b.

\*tete. O ss, o/ss.

\*tcale. Y b, y/b.

\*kole. Y ss, y/ss.

*Uncle Class*

\*üpü. F b.

ene. F ss.

\*kaka. M b.

\*tomu. M o ss.

\*esa. Mn b ch, wm ss ch.

\*üpsa. Wm b ch, mn ss ch.

\*anisü. M y ss.

*Cousin Class*

Sb terms are employed by //c according to relative age. They are also applied to the ch of m b d. If, however, a mn has married his m b d, he calls her ch by the term for offspring whether they are his ch or his stch.

\*kaka. M b s.

\*anisü. M b d.

\*üpsa. Mn f ss ch.

\*esa. Wm f ss ch.

<sup>36</sup> E. W. Gifford, *Miwok Moieties*, present series, XII, 170-189, 1916.



*Step-relation Class*

*haiyi. Stf.	*esa. Stch.
*anisü. Stm.	*tcale. Y stb.
*tatci. O stb.	*kole. Y stss.
*tete. O stss.	

*Spouses of Uncles and Aunts*

*tomu. F b w o than m.	*esa. H b ch, w ss ch.
*anisü. F b w y than m.	*wokli. W b ch.
*kawu. F ss h.	*manisa. H ss s.
enetci. M b w.	*lupuba. H ss d.
*haiyi. M ss h.	

*Spouse Class*

naña. H.	osa. W.
*oilepa. Csp.	

*Parent-in-law Class*

*hewasu. Pl, fl b, ml ss, h m b, sb pl, h f ss.
*lupuba or lotupe. Dl, sb dl, chl ss. Lotupe also means "cook."
*manisa. Sl, mn b sl, wm ss sl, chl b.
pinuksa. Mn ss d h, w m b. In address the dual is employed.
*kawu. Wm b d h.
*wokli. W f ss.

Pl and chl addressed each other in the dual, as though they were "two people."

*Grandparent-in-law Class*

*wokli. W gp, h gf.	*kawu. Gd h.
*kolina. H gm.	*olo. Gs w.

*Sibling-in-law Class*

*wokli. W sb, h b.	*kawu. Ss h.
*olo. B w.	*kolina. H ss.
*oilepa. W ss h, h b w.	*lupuba. W b w.
*hewasu. H ss h.	

*Child's Parent-in-law*

This relative is denoted by the widespread Miwok-Yokuts term maksü.

The informant, Frank Powell, said that chl and pl avoided each other. Both informants stated that marriage to the anisü (particularly a c) was the orthodox form of matrimony. A mn might make indecent remarks to his anisü with perfect propriety. Isaac Howdy cited as a case of xc marriage, that of Ned Allee, a Miwok living in El Dorado county, who married his anisü (m b d).

In line with this form of xc marriage is the speech taboo and avoidance between a mn and his enetci (m b w), who, with xc marriage the vogue, becomes his potential ml. If conversation is necessary, the two talk to each other as to "two people." It is improper to say "What art thou doing?" The speaker must say "What are you doing?"

## PLAINS MIWOK

The data for the Plains Miwok kinship system were obtained from a Northern Yokuts w<sup>m</sup> named Trinidad, who lives at Pleasanton, Alameda county. The Indians living at Pleasanton are the remnant of those once gathered at Mission San José. Among these Indians, Plains Miwok became the medium of communication.

*Parent Class*

appa. F.	*awü. Ch.
üka. M.	

*Grandparent Class*

papa. Gf.	ete. F m.
otcö. M m.	tcatco. Gch.

*Sibling Class*

atatci. O b.	ati. Y sb.
tika. O ss.	

*Uncle Class*

*tata. F b.	*tune. Wm ss ch.
ene. F ss.	*awü. B ch.
*tomu. M o ss.	kaka. M b.
tete. M y ss.	*woi. Mn ss ch.

F ss, m b, and m o ss are denoted by the same terms employed by Northern and Central Miwok. M y ss is denoted by the term tete, employed in the Sierra Nevada Miwok dialects for o ss. F b and f ss both have as reciprocal the term awü, offspring. M b takes a special term as reciprocal. M o and y ss have as reciprocal the term tune, which in the Sierra Nevada Miwok dialects denotes daughter.

*Cousin Class*

//c are merged in sb according to relative age and sex.

As to xc the data are not clear, the informant not taking into account the sex of the speaker, which throughout central California is a determining factor. At any rate, two facts stand out clearly. M b s (kakatci) is identified with m b (kaka) and m b d (tetetci) with m y ss (tete) as elsewhere in central California. The ending -tei apparently has diminutive force. F ss d is also identified with m y ss if the information is to be trusted. F ss s is denoted by a unique term. The data for xc once removed do not align themselves satisfactorily with the data on first c.

*Paternal Cross-cousins*

otu. F ss s.	*awü. F ss s ch.
tetetci. F ss d.	*woi. F ss d ch.

*Maternal Cross-cousins*

kakatci. M b s.	*awü. M b s ch.
tetetci. M b d.	*woi. M b d ch.

*Spouses of Uncles and Aunts*

\*tomu. F b w.

\*nanaiya. F ss h.

enetcī. M b w. There is no taboo, as in Sierra Miwok,  
against a mn addressing this relative.

\*tata. M ss h.

\*tune. H sb ch.

\*wokli. W b ch.

\*awü. W ss ch.

*Spouse Class*

nana. H.

ösö. W.

*Parent-in-law Class*

A single term, hewa, denotes both the senior and junior generations of both sexes. There is said to have been no speech taboo.

*Grandparent-in-law Class*

Relatives of this class are merged in the pl and chl.

*Sibling-in-law Class*

\*wokli. W sb, h b, h b w.

kücin. B w, h ss.

\*nanaiya. Ss h, w ss h.

*Child's Parent-in-law*

This relative is denoted by the exclusive term weiya.

## LAKE MIWOK

In address the terms are used as listed below (except where otherwise noted). In reference terms for one's own relatives are usually preceded by ga (my), as ga elai hena (my ch ♂) or ga elai gola (my ch ♀).

*Parent Class*

Terms for f, m, and ch were secured. Two terms are employed for ch, one in address, the other in reference.

api. F.

\*ec. Ch (address). Compare Wappo ecye, s ch.

unu. M.

elai. Ch (reference). It may be applied also to any ch. Elai probably has an origin in common with Southern Wintun and Southern Maidu ilai.

*Grandparent Class*

papa. Gf, gp b, ggf.

\*teatso. Gch, sb gch, ggch.

\*hama. Gm, gp ss, ggm.

*Sibling Class*

\*ata. O b, o/b.

\*ela. Y sb, y/sb.

\*woko. O ss, o/ss.

*Uncle Class*

*ola. F o b.	*tata. F y b.
eneni. F ss.	*ulatci. M o ss.
*amko. M y ss.	*ec (address), elai (reference). B ch, wm ss ch.
*kaka. M b.	*towe'. Mn ss ch.

*Cousin Class*

*ata. O ♂ //c.	*ela. Y //c.
*woko. O ♀ //c.	*towe'. Mn f ss ch.
*kaka. M b s.	*ec (address), elai (reference). Wm f ss ch.
*amko. M b d.	

*Step-relation Class*

*tata. Stf.	*ec. Stch (address).
*amko. Stm.	*elai. Stch (reference).
*ata. O stb.	*ela. Y stsb.
*woko. O stss.	

*Spouses of Uncles and Aunts*

*ulatci. F o b w.	*amko. F y b w.
*ola. M o ss h.	*tata. M y ss h.

In the above four terms difficulty was encountered in determining whether the age of the relative or the age of the connecting relative was the deciding factor; that is, ulatci might mean "f b w o than m," rather than "f o b w."

*kauko. F ss h.	*ec (address), elai (reference). H b ch, w ss ch.
*hama. M b w.	*Len. W b ch.
	*tcatso. H ss ch.

*Spouse Class*

ha. Sp (address).	kule'. W (reference).
miwu. H (reference).	*oiya. Cw.

*Parent-in-law Class*

hatsot. Pl (address), chl (address).	esgot. Chl (address). The terms for offspring are also employed, although the terms for f and m are not reciprocated.
memnawa. Fl (reference).	membotsi. Dl (reference).
memhugui. Ml (reference).	memtai. Sl (reference).
	memama. Chl (reference).

The terms for pl are applied to the pl sb and to the sb pl. Conversely, the terms for chl are applied to the sb chl and to the chl sb.

Although the informant claimed that no pl taboo was operative, the unusual number of terms in this class suggest that there may have been a mild form of the taboo which perhaps involved the use of dual or plural forms of address.

*Grandparent-in-law Class*

Relatives of this class, both junior and senior, are merged in the pl class.

*Sibling-in-law Class*

\*Len. W sb, h b.

\*kauko. Ss h.

\*eku. B w.

\*eyi. H ss.

\*oiya. W ss h, h b w.

The w b w is called either o or y ss according to her relative age. In similar manner the h ss h is denoted by a b term. A number of three-st sbl terms not recorded in other languages were secured in Lake Miwok. These together with their reciprocal terms are listed below.

	Term	Reciprocal
Ss h b	*kauko	*Len
Mn b w sb	*Len	*kauko
Wm b w b	*Len	*eku
Wm b w ss	*eku	*eyi

*Child's Parent-in-law*

This relative is called tomela, a word obviously from the same source as Southeastern Pomo witomela, which has the same meaning.

## COAST MIWOK

The following fragmentary Coast Miwok kinship system was obtained from Carl Sebastian, a Lake Miwok living near Middletown, Lake county. Sufficient of the system is present to indicate that it is similar to the Lake Miwok system. Although Sebastian was unable to inform me concerning xc, Mrs. William Smith, the Wappo w of a Coast Miwok living at Bodega' bay, stated that the m b d was called by the term for m y ss. This establishes beyond all peradventure that the xc terminology was of the usual Miwok type.

*Parent Class*

api. F.

\*ai. Ch. In reference a s is ai hena (ch ♂) and  
a dai goya (ch ♀).

unu. M.

*Grandparent Class*

p pa. Gf, ggf.

\*tcateai. Gch, ggch.

\*hama. Gm, ggm.

*Sibling Class*

ata. O b, o/b.

amo. Y sb, y/sb.

woko. O ss, o/ss.

*Uncle Class*

ola. F o b.

\*ai. Mn b ch, wm ss ch.

tata. F y b.

kaka. M b.

\*ulatci. M o ss.

towe'. Mn ss ch.

\*amoko. M y ss.

*Cousin Class*

Data for this class are quite fragmentary. F b ch are denoted by sb terms and undoubtedly so are the m ss ch, although the informant professed ignorance. The xc terminology is undoubtedly of the usual Miwok type, as indicated by the fact that the m b d is called amoko, the term for m y ss.

*Step-relation Class*

Stf equals f y b, stm equals m y ss, and stch equals ch. The stsb are denoted by sb terms.

*Spouses of Uncles and Aunts*

\*ulatci. F o b w.

\*ai. H b ch.

\*amoko. F y b w.

\*tcatcai. H ss ch.

\*hama. M b w.

*Spouse Class*

amda. H (reference).

gule. W (reference).

*Parent-in-law Class*

memoiyi. Fl. Oiyi means "old man."

memgoleyi. Dl (reference).

memgugeyi. Ml.

memdaiyi. Sl (reference).

aigotci. Chl (address).

*Grandparent-in-law Class*

Relatives of this class are merged in the pl class.

*Sibling-in-law Class*

gau. Ss h.

eyi. H ss.

*Child's Parent-in-law*

The term oiyamen is applied to this relative. In Central Miwok this term, or the very similar oiyame, means dl.

## WINTUN

## SOUTHEASTERN WINTUN

The Southeastern Wintun kinship terminology was obtained at Colusa on the west bank of the Sacramento river. Counting vocative forms only, the system operates with but seventeen terms. Really, I should say sixteen terms, as the word ilai (y ch) may be treated as a synonym of de (ch or offspring of any age and of either sex).

*Parent Class*

\*dantce. F.

\*de. Offspring (any age).

\*nake. M.

ilai. Ch (usually y).

*Grandparent Class*

- \*ape. Gf and ancestors.      \*tai. Gch and descendants.  
 \*amake. Gm and ancestresses.

*Sibling Class*

- \*labe. O b, o/b.      \*Lane. Y sb, y/sb.  
 \*hutuntce. O ss, o/ss.

*Uncle Class*

- \*dantce. F b.      \*de. Mn b ch, wm ss ch.  
 \*hutuntce. F ss.      \*Lane. Wm b ch.  
 \*ape. M b.      \*tai. Mn ss ch.  
 \*nake. M ss.

The term for gm (amake) is applied to the p m b d, since the p designates her as m (see xc).

*Cousin Class*

- \*labe. O ♂ //c, m b d o s, m f ss o s.  
 \*hutuntce. O ♀ //c, m b d o d, m f ss o d.  
 \*Lane. Y //c, m b d y ch, m f ss y ch.  
 \*nake. M b d, d of ♂ descendant of m b through ♂.  
 \*de. Wm f ss ch.  
 \*tai. Mn f ss ch and descendant, wm f ss ch descendant.  
 \*ape. M b s, ♂ descendant of m b through ♂.

The terms for first c once removed, twice removed, thrice removed, and so on, are indicated in the preceding list. It now remains to present the terms for second c. The ch (second c) of // first c call each other by the same terms as ch of real b and ss. First c address each other by the terms for b and ss. In the same manner the ch (third c) of // second c call each other by the same terms as ch of real b and ss.<sup>37</sup>

Turning to second c who are the ch of xc, we find a much more complicated situation. In the following list second c are listed directly below the first c who are their p.

- First Cousins: ape (♂) (m b s).....tai (♂ or ♀) (mn f ss ch)  
 Second Cousins: { ape (♂).....tai (♂ or ♀)  
                               nake (♀).....de (♂ or ♀)  
 First Cousins: naked (♀) (m b d).....de (♂) (wm f ss s)  
 Second Cousins: { hutuntce (♀).....Lane (♂ or ♀)  
                               dantce (♂).....de (♂ or ♀)  
 First Cousins: naked (♀) (m b d).....de (♀) (wm f ss d)  
 Second Cousins: { naked (♀).....de (♂ or ♀)  
                               ape (♂).....tai (♂ or ♀)

<sup>37</sup> // first c are the ch of two b or of two ss; // second c are the ch of two ♂ // first c or of two ♀ // first cousins.

Two Southeastern Wintun informants (Thomas Odock and William Benjamin) volunteered the information that in former times men might marry their maternal xc (m b d), and often did so. William Benjamin's w stands in that relation to him. This form of xc marriage is similar to that practiced by the Miwok. The terms by which the two parties to the contract call each other are identical: In Wintun the mn calls the wm *nake* (m) and she reciprocates with *de* (s). In Miwok the mn calls the wm *anisü* (potential stm) and the wm calls the mn *añsi* (s). Whether or not Wintun xc marriage arose in the fashion postulated for Miwok xc marriage<sup>38</sup> must remain in doubt until genealogical and other social evidence has been collected from the Wintun.

### *Step-relation Class*

Stp equals p, stch equals ch, and stsb equals sb. In reference the stf is called *kumen*. In reference the stm is called *mokon*.

### *Spouses of Uncles and Aunts*

M ss h equals f, f b w equals m, and the reciprocals are those for ch. M b w equals gm, since m b is identified with gf. She reciprocates with the term for gch. F ss h is called bl, since f ss equals o ss. He reciprocates in kind.

### *Spouse Class*

home. Sp.	wi. H (reference).
onük. W (reference).	nikantce. Csp. Said to mean literally "friend."

### *Parent-in-law Class*

A single term, *des*, is employed, being used in the form *nai desli*. Informants stated that *des* was not employed actually as a term of address, as it was improper to address such a relative by the term of relationship. Pile, they, is employed in address. The speech taboo between a mn and his ml and a wm and her fl operated in former times. The various meanings of *des* follow: pl, sb pl, chl, chl sb.

### *Grandparent-in-law Class*

- \*ape. Sp gf, and, in fact, anyone whom sp calls ape.
- \*amake. Sp gm, and, in fact, anyone whom sp calls amake.
- \*tai. Gch sp, and, in fact, sp of anyone called tai.

### *Sibling-in-law Class*

xen. Sp sb.	tilantce. Ss h.
nikantce. W ss h.	

poxantce. B w. This term was also given for h b w. This seems a curious procedure, as the reciprocal of h b w (poxantce) is h b w (poxantce) and not xen, the normal reciprocal of poxantce. It is possible that the correct term for h b w is *nikantce*, as for w ss h.

The following list presents an interesting collection of terms for cl (c sp and sp c). As these have not been collected from other groups, it seems not worth

<sup>38</sup> Present series, XII, 191, 1916.



while to discuss them except to say that the term for the c determines the term for the cl. Thus the h of a xc called nake (m) would be denoted as dantce (f), and not as a sbl.

dantce. M b d h, h of ♀ descendant of m b through ♂.

de. W f ss ch w ♂ ancestor's through ♂ ss ch.

taí. H f ss ch h ♂ ancestor's (through ♂) ss ch.

amake. M b s w, w of ♂ descendant of m b through ♂.

des. Sp m b d, wm f s h sp, w f ss ch sp, sp m b d h, sp of ch of ss of w ♂ ancestor through ♂, h of ♀ descendant (through ♂) of sp m b.

### *Child's Parent-in-law*

This relative is denoted by the exclusive term tcaiyi.

## SOUTHWESTERN WINTUN

The Southwestern Wintun have a kinship system which seems to be identical in application with that of the Southeastern Wintun. It was obtained from but a single informant, a native of Cortina valley, Colusa county. The only terms which differ in the stem from corresponding Southeastern Wintun terms are those for m and o ss. In Southeastern Wintun nake is the term for m; while in Southwestern Wintun nentce is the term. This latter term was said to have the vocative form nehe. Southeastern Wintun hutuntce (o ss) appears in the form of uzuteu in Southwestern Wintun.

## CENTRAL WINTUN

The incomplete Central Wintun, or Nomlaki, kinship system presented herewith was obtained from three informants residing on Round Valley reservation, Mendocino county. It represents the particular form in use at Paskenta, Tehama county.

### *Parent Class*

dan. F. In reference netdan, in address mita, my f.

na. M. In reference neni, in address mina, my m.

\*ku. Offspring. elet. Ch, baby.

### *Grandparent Class*

tcúposoko. Gf, gp b, ggf.

\*tce. Gch, sb gch, ggch.

tcama. Gm, gp ss, ggm.

### *Sibling Class*

labûn. O b. In reference netlabûn, in address milûm, my o b.

\*le. Y b. In reference net'e, in address mimum, my y b.

\*djun. O ss.

\*lahai. Y ss.

*Uncle Class*

*dumkin. F b.	*ku or bitcen. Mn b ch, wm ss ch.
*djun. F ss	*le. Wm b s.
*tcupo M b.	*lahai. Wm b d.
*nendet. M ss.	*tee. Mn ss ch.

M b seems to be identified with the gf; the term, tcupo, probably being identical with that for gf, tcuposoko. The suffix -soko on the latter is the only bar to complete identification. In the junior generation there is no such impediment, for a mn calls his ss ch by the term for geh (tee).

*Cousin Class*

//c are designated by sb terms according to relative age. The data on xc are fragmentary. M b s is called by the term for m b and reciprocates with that for geh or mn ss ch. This clearly indicates that the xc terminology is of the Southern Wintun and central Californian type.

*Step-relation Class*

*dumkin. Stf.	*ku or bitcen Stch.
*nendet. Stm.	

*Spouses of Uncles and Aunts*

*nendet. F b w.	*somon. W b s.
*ku or bitcen. H b ch, w ss ch.	dokoi. W b d.
*Len. F ss h.	*dumkin. M ss h.

*Spouse Class*

wi. H.	bohûn. W.
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Cw is denoted by a ss term.

*Parent-in-law Class*

*des. Fl, sl, sb fl, chl b, pl b, sb sl.	tumbelum. Ml, sb ml, pl ss.
	be'umba. Dl, chl ss, sb dl.

*Grandparent-in-law Class*

Relatives of this class are merged in the gp class.

*Sibling-in-law Class*

*somon. W b	*dokoi. Ssl.
*Len Ss h, h b.	

The h b w is called ss, as is the cw.

*Child's Parent-in-law*

This relative is denoted by the term for fl and sl (\*des).

Following the death of the connecting relative terms of affinity are discontinued. The levirate was formerly practiced. The surviving b did not always marry the widow, however. He might "let her go" and "feed" the ch only.

## NORTHWESTERN WINTUN OF TRINITY COUNTY

The following kinship system, representative of Hayfork, Trinity county, was procured from Mrs. Mary Major, a Wintun-Lassik wm at Round Valley reservation. Although not very complete, the system shows affinities with both the Central and other Northern Wintun systems.

*Parent Class*

tata. F	ku. S.
tutu. M.	bitcen. D.

*Grandparent Class*

kiyima. F f.	puhaiya. F m.
*kiye M f.	*puta. M m.
	*tcai. Gch.

The term for xnp or xnc denotes the gch. Along the same lines is the identification of m f with m b and of m m with f ss. The f f is designated by a variant of the term for m b and the f m by a variant of the term for f ss.

*Sibling Class*

*sabe O b	lekut. Y b.
laiya O ss.	*laikut. Y ss.

*Uncle Class*

*domple. F b.	*kude or pukusta. Mn b s, wm ss s.
*puta. F ss.	*bitcende. Mn b d, wm ss d.
*kiye. M b.	*tcai Wm b ch, mn ss ch.
*nene. M ss.	

// np and nc are denoted by variants of the terms for offspring.

*Cousin Class*

//c are merged in sb according to sex and relative age. The data on xc are incomplete. Enough were procured, however, to indicate that the classification is of the central Californian type. M b d equals m ss and, conversely, a wm f ss ch equal her ss ch. A bit of information concerning first c once removed bears this out.

*kude or pukusta. Wm f ss s.	*bitcende. Wm f ss d.
*nene. M b d	laikut. Mn m b d y d.
*tcai. Wm f ss ch ch.	*sabe. Wm m f ss o s.
*puta. M m b d	

*Step-relation Class*

*domple. Stf.	*kude. Sts.
*nene. Stm.	*bi' cende. Std.

*Spouses of Uncles and Aunts*

*nene. F b w.	*kude or pukusta. H b s, w ss s.
*kiye F ss h.	*bitcende. H b d, w ss d.
*puta. M b w.	*tcai. W b ch, h ss ch.
*domple M ss h.	

*sabe.	O b, o /b.	*lekut.	Y b, y /b.
*la.	O ss, o /ss.	*laikut.	Y ss, y /ss.

### Uncle Class

domple. F b.	kule or kute Mn b s, wm ss s.
nene. M ss.	pukwi. Mn b d, wm ss d.
*kiye. M b.	*tcai. Mn ss s, wm b s.
*puta. F ss.	*tcami. Mn ss d, wm b d.

### Cousin Class

//c are classed by the four terms for sb. Whether an individual is called o or y b or ss depends not upon his age but upon the relative ages of the connecting p. A fifth term, \*pesa, which denotes //c of like sex, is also employed.

The ch (first c once removed) of one's // first c are addressed as the ch of one's b and ss. Similarly, since // first c are called b and ss, // second c (the ch of two // first c of the same sex) also are called b and ss, and so on *ad infinitum*.

Considering xc, we find that the principle of classifying them in the generations above and below the speaker is followed. This principle, however, is modified by a consideration of the relative ages of the connecting p, thus making possible the placing of any one xc either in the generation above or in the generation below the speaker. For example, the f ss s is called tcai (np) if f ss is younger than f and kiye (u) if the f ss is older than f.

*kiye. F o ss s, m o b s.	*tcai. F y ss s, m y b s.
*puta. F o ss d, m o b d.	*tcami. F y ss s, m y b d.

Briefly, then, if one's xc is the ch of the f o ss or the m o b, that xc is called either xa (puta) or xu (kiye) according to sex. Conversely, if one's xc is the ch of the f y ss or the m y b, that xc is called xnc (tcami) or xnp (tcai) according to sex.

First xc once, twice, thrice, *et ad infinitum* times removed are called by the term applied to the first c, their ancestor, varied, of course, only to fit the sex of the speaker. The cases are as follow:

1. If my  $\left\{ \begin{smallmatrix} m b s \\ f ss s \end{smallmatrix} \right\}$  is kiye to me ( $\sigma$  or  $\varphi$ ), his descendants are all kiye and puta to me. I am tcai or tcami to all his descendants forever.
2. If my  $\left\{ \begin{smallmatrix} m b s \\ f ss s \end{smallmatrix} \right\}$  is tcai to me ( $\sigma$  or  $\varphi$ ), his descendants are all tcai and tcami to me. I am kiye or puta to all his descendants forever.
3. If my  $\left\{ \begin{smallmatrix} m b d \\ f ss d \end{smallmatrix} \right\}$  is puta to me ( $\sigma$  or  $\varphi$ ), her descendants are all puta and kiye to me. I am tcai or tcami to all her descendants forever.
4. If my  $\left\{ \begin{smallmatrix} m b d \\ f ss d \end{smallmatrix} \right\}$  is tcami to me ( $\sigma$  or  $\varphi$ ), her descendants are all tcai and tcami to me forever. I am kiye or puta to all her descendants forever.

In the same manner, second, third, fourth, *et ad infinitum* xc apply to each other the terms used by their ancestors, the first xc, varied, of course, to fit the sex of the speaker. The cases are as follows:

1. If I,  $\sigma$ , am kiye to you,  $\sigma$ , you are tcai to me. Hence, my ch call your ch tcai and tcami. Your ch call my ch kiye and puta.
2. If I,  $\sigma$ , am kiye to you,  $\varphi$ , you are tcami to me. Hence, my ch call your ch tcami and tcami. Your ch call my ch kiye and puta.

3. If I, ♀, am puta to you, ♂, you are tcai to me. Hence, my ch call your ch tcai and tcami. Your ch call my ch kiye and puta.

4. If I, ♀, am puta to you, ♀, you are tcami to me. Hence, my ch call your ch tcai and tcami. Your ch call my ch kiye and puta.

Hence the following inclusive definitions of the four xc terms are in order:

kiye. ♂ descendant of f o ss or of m o b.  
 puta. ♀ descendant of f o ss or of m o b.  
 tcai. ♂ descendant of f y ss or of m y b.  
 tcami. ♀ descendant of f y ss or of m y b.

### *Step-relation Class*

Stf equals f b, stm equals m ss, and the reciprocals correspond. Stsb are equated to sb. The term (pesa) employed for //c of like sex is also used for stsb of like sex, although not for sb.

### *Spouses of Uncles and Aunts*

These relatives by marriage are completely identified with a and u and have reciprocals to correspond.

### *Spouse Class*

yetdati. Sp.	wi. H (reference).
bohûn. W (reference).	*pesa. Csp.

### *Parent-in-law Class*

\*da'. Pl, chl, pl sb, chl sb, sb pl, sb chl. One refers to his pl as pubat, to a single pl or chl as pite if the person is absent and as ebas if the person is present.

### *Grandparent-in-law Class*

\*da'. Sp gp, gch sp, sp of anyone called tcai or tcami, anyone whom sp calls puta, putatcibet, kiye, or kiyetcibet.

### *Sibling-in-law Class*

somon. Bl.	yenak. Ssl. In reference a mn b w is denoted as dokoi.
*sabe. W o ss h.	*lekut. W y ss h.
*la. H o b w.	*laikut. H y b w.
*pesa. W ss h, h b w.	

### *Child's Parent-in-law*

This relative is denoted by the term for pl and chl.

## NORTHEASTERN WINTUN

The eastern subdialect of Northern Wintun, spoken east of the Sacramento river in Siskiyou and Shasta counties, employs twenty-seven terms of relationship. The twenty-six terms employed west of the river are used and, in addition, a special term, latcibet. This takes the place of the western nene and is applied, like it, to the m ss, f b w, and stm. Nene, in the eastern subdialect, is employed for xc, as is also kute, which in the western language is only a synonym of kule. In the classification of c is found about the only deep-going difference between the two systems. This is elucidated in the following paragraphs.

As with the Northern Wintun west of the Sacramento river, // first c among the Northeastern Wintun are reckoned as o or b and ss according to the relative ages of the connecting p. The same principle applies to the more remote //c.

Passing to xc we find a combination that differs from the scheme of the Southern and Central Wintun and from the scheme of the other Northern Wintun, which systems class all xc in the generations above and below the speaker and by terms already in use for relatives who normally belong in these generations. Northeastern Wintun does this only partially, and ignores entirely the relative ages of the connecting p, which in Northern Wintun, spoken west of the Sacramento, is a determining factor. Northeastern Wintun xc stand as follows:

♀ xc.....	nene
Wm ♂ xc.....	kute
Mn m b s.....	kiye
Mn f ss s.....	tcai

Only two of the four terms (kiye, puta, tcai, and teami) employed by the Northern Wintun west of the Sacramento are used, viz., kiye and tcai. Their application is fixed and does not depend upon the relative ages of the individuals concerned or of the connecting p. These two terms, however, apply normally to a xu and a xnp, and hence are in the generations above and below the speaker. In their fixity they recall the corresponding Southern Wintun terms ape and tai which are similarly used for the same xc.

The two remaining terms kute and nene are purely c terms and involve no age factor, nor any violation of generation. In this last respect they are unique among Wintun terms for xc.

It now remains to present the data on the descendants of first xc. First xc once removed are as follows: (1) Kiye's ch are kiye and nene. (2) Teai's ch are tcai and teami. (3) Kute's ch are tcai and teami. (4) Mn nene's ch are tcai and teami. (5) Wm nene's ch are kute and pukwi.

The terminology for the ch of nene xc seems to indicate that these xc are regarded in the generation of the speaker and as two ss, and not in the generations above and below the speaker as in the terms kiye and tcai.

The terms used between second xc are indicated below.

The second c are placed directly below the first c who are their p. Reciprocal terms are opposite one another.

First Cousins:	kiye (♂) (mn m b s) .....	tcai (♂) (mn f ss s)								
Second Cousins:	<table><tr><td>kiye (♂).....</td><td>tcai (♂)</td></tr><tr><td>kute (♂).....</td><td>nene (♀)</td></tr><tr><td>nene (♀).....</td><td>kute (♂)</td></tr><tr><td>nene (♀).....</td><td>nene (♀)</td></tr></table>	kiye (♂).....	tcai (♂)	kute (♂).....	nene (♀)	nene (♀).....	kute (♂)	nene (♀).....	nene (♀)	
kiye (♂).....	tcai (♂)									
kute (♂).....	nene (♀)									
nene (♀).....	kute (♂)									
nene (♀).....	nene (♀)									
First Cousins:	<table><tr><td>kute (♂) .....</td><td>nene (♀)</td></tr><tr><td>(wm m b s or wm f ss s).....</td><td>(mn f ss d or mn m b d)</td></tr></table>	kute (♂) .....	nene (♀)	(wm m b s or wm f ss s).....	(mn f ss d or mn m b d)					
kute (♂) .....	nene (♀)									
(wm m b s or wm f ss s).....	(mn f ss d or mn m b d)									
Second Cousins:	<table><tr><td>kiye (♂).....</td><td>tcai (♂)</td></tr><tr><td>kute (♂).....</td><td>nene (♀)</td></tr><tr><td>nene (♀).....</td><td>kute (♂)</td></tr><tr><td>nene (♀).....</td><td>nene (♀)</td></tr></table>	kiye (♂).....	tcai (♂)	kute (♂).....	nene (♀)	nene (♀).....	kute (♂)	nene (♀).....	nene (♀)	
kiye (♂).....	tcai (♂)									
kute (♂).....	nene (♀)									
nene (♀).....	kute (♂)									
nene (♀).....	nene (♀)									
First Cousins:	<table><tr><td>nene (♀) .....</td><td>nene (♀)</td></tr><tr><td>(wm m b d or wm f ss d).....</td><td>(wm f ss d or wm m b d)</td></tr></table>	nene (♀) .....	nene (♀)	(wm m b d or wm f ss d).....	(wm f ss d or wm m b d)					
nene (♀) .....	nene (♀)									
(wm m b d or wm f ss d).....	(wm f ss d or wm m b d)									
Second Cousins:	siblings.....	siblings								

The third group affords certain proof that ♀ xc are regarded exactly as are ♀ //c, viz., as ss. This point has already been mentioned in connection with first c once removed, where it was noted that a pair of nene c apply to the ch of each the terms for identical np and nc. This is a decided departure from Northwestern and Southern Wintun practices.

Strictly speaking, the principle of generation is violated in only one pair of Northeastern Wintun xc, the kiye-teai pair, who stand in an u-np relation, as do their descendants. We have shown that the nene-nene pair actually stand as two ss, the criterion being the manner of classification of their descendants. Apparently the kute-nene pair stand in the b-ss relation, for they designate each other's offspring as xnp and xnc, while said offspring designate each other as xc.

The detailed data for c more remote than first are presented in the following list:

- kule. Wm f ss d s, wm m b d s.      pukwi. Wm f ss d d, wm m b d d.  
 puta. Mn m b d of f and of f ♂ ancestor through ♂, ss d of f ♂ ancestor through ♂,  
       wm f m b d, wm f ♂ ancestor's (through ♂) m b d.  
 tcai. Mn f ss ♂ descendant, wm f ss s ♂ descendant, wm m b s ♂ descendant, mn  
       m b d ♂ descendant.  
 teami. Wm m b s ♀ descendant, mn m b d ♀ descendant, f ss s ♀ descendant, mn  
       f ss d ♀ descendant.  
 kute. Wm f ss s, wm m b s, wm f ♂ ancestor's (through ♂) ss s.  
 kiye. Mn m b s, mn m b ♂ descendant through ♂.  
 latcibet. M m b d, m f ss d.  
 nene. M b d, mn m b ♀ descendants through ♂, f ss d.

## POMO

### SOUTHEASTERN POMO

The Southeastern Pomo kinship system presented herewith was secured from Clifford Salvador, who lives near Lower Lake, Lake county. Salvador was aided by a ♀ relative.

#### *Parent Class*

- imek. F.      \*wikwi (address). \*wikat (reference). S.  
 icek. M.      \*wimfat. D.

Unlike certain of the other Pomo groups (Eastern, Central, and Southern), the Southeastern Pomo do not normally call ch by the terms for p. Among the Central Pomo, for example, a s is addressed by the term for f, a d by the term for m. Jokingly, however, among the Southeastern Pomo, the s is called f and the d m, not only the p applying these terms but every one else. Sometimes a little girl may be called ggm, and she retorts with the term for ggch to those who call her thus. It is the custom at times to address a ch by the term of relationship applied to its namesake. For example, Salvador's d is named after her m y ss (imkiyax) and is jokingly called imkiyax by every one. These strange terms of relationship, however, are not always applied so logically. Very often they seem to be applied by an adult to a ch with much the same feeling as accompanies our "little mn," or perhaps as a m dignifies her s by calling him "b."



*Grandparent Class*

imbat. F f, f p b.	imtcen. M f, m p b.
ima'. F m, f p ss.	*imka'. M m, m p ss.
wowo. Ggf, also ggeh.	*xotc. Gch, sb gch, ggeh.
wokta. Ggm, also ggd.	

*Sibling Class*

imex. O b, o /b.	wimduta. Y b, y /b.
suman. Mn b, mn /b.	atxa or wimtax. Y ss, y /ss.
index. O ss, o /ss.	

*Uncle Class*

*imtcex. F b.	*imkiyax. M y ss.
imwe. F ss.	*wikat. B s, wm ss s.
*imsen. M b.	*wimfat. B d, wm ss d.
imsut. M o ss.	*hadjin. Mn ss ch.

*Cousin Class*

*hadjin. Mn f ss ch.	*imsen. M b s.
*wikat. Wm f ss s.	*imkiyax. M b d.
*wimfat. Wm f ss d.	

// are merged in the sb class according to relative age and sex.

*Step-relation Class*

Stf equals f b, stm equals m y ss, stch equal offspring, and stsb equal sb.

*Spouses of Uncles and Aunts*

*imsut. F b w o than m.	*wikat. H b s, w ss s.
*imkiyax. F b w y than m.	*wimfat. H b d, w ss d.
*imkon. F ss h.	*wimfak. W b s.
*imka'. M b w.	*wimfak witet. W b d.
*imtcex. M ss h.	*xotc. H ss ch.

F ss h equals ss h as though f ss were ss. He reciprocates in kind. M b w equals maternal gm and h ss ch equals gch. This seems to be in line with the fact that the h ss h is called sl. His ch is naturally then a gch.

*Spouse Class*

wiba. H.	wida. W.
----------	----------

Cw is called ss.

*Parent-in-law Class*

wimba. H f, h p b, ss h f.	*wimôt. Dl, sb dl, chl ss.
wimteat. W f, w p b, b w f.	*wimót. Sl, sb sl, chl b.
wimka. Ml, pl ss, sb ml.	

The last two terms are but slightly differentiated in sound (wim-ôt, dl, and wi-mót, sl).

*Grandparent-in-law Class*

This class is merged in the pl class.

*Sibling-in-law Class*

*wimfak. W b.	*imkon. Ss h.
wimfak witet. W ss.	wimhutax. H b.
wiaxmex. B w.	wimkatin. H ss.
wixela. H b w, w ss h. The term is said to mean "friend."	*wimka. W b w.
	*wimot. H ss h.

*Child's Parent-in-law*

This relative is denoted by the term witomela, clearly based on a different radical from the djan of Southern and Southwestern Pomo, but apparently from the same stem as Lake Miwok tomela for the same relative.

My Southeastern Pomo informant stated that pl taboos are lacking, that the levirate was practiced, that marriage to the w b d was practiced, that xc marriage is modern, and that terms of relationship were not altered following the death of the connecting relative. All these statements, coming from a single informant of between thirty and forty years of age, are subject to question, and are presented only for what they may be worth.

## EASTERN POMO

Dr. Kroeber presents the Eastern Pomo kinship system in his "California Kinship Systems."<sup>39</sup> I add here a bit of detail.

*Cousin Class*

//c are sb according to relative age and sex.

Xc are classed in the generations above and below the speaker's: m b s equals m b, m b d equals m y ss. F ss ch equal ss ch and by a mn are designated by the special term for mn ss ch, by a wm by the terms for offspring.

*Step-relation Class*

Stf equals f y b, stm equals m y ss, stch equals ch, and stsb equals sb.

*Spouses of Uncles and Aunts*

M ss h equals f y b. F b w and m b w are both equated to m y ss. The reciprocals of these three terms are those for offspring. F ss h equals ss h, f ss being regarded as a ss. The reciprocal term is that for w b, which here is applied to w b ch.

<sup>39</sup> Present series, XII, 370, 1917.

## NORTHEASTERN POMO

The appended list of Northeastern Pomo kinship terms is taken from a vocabulary in Dr. S. A. Barrett's "The Ethno-Geography of the Pomo Indians."<sup>40</sup>

*Parent Class*

-mee. F.	fatada. D.
tca'ki. M.	

*Grandparent Class*

matce-dai. F f.	matei-dai? F m.
tatce-dai. M f.	katei-dai. M m.
	ūtōwū. Gch.

*Sibling Class*

tiki-dai? O ss.	miki-dai? Y b.
	deki-dai? Y ss.

*Uncle Class*

aūteki. F b.	sū-dai. M b.
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*Spouse Class*

-bike. H.	awī-daki. W.
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## CENTRAL POMO

The Central Pomo kinship system was obtained from three informants.

*Parent Class*

mede (address), me' (reference). F, s.	*kegu. Ch (reference).
teede (address), tce (reference). M, d.	*djacwe. S, also gs.
	*matiswi. D, also gd.

*Grandparent Class*

*bate. F f, f p b, f gf.	mate. F m, f p ss, f gm.
djate. M f, m p b, m gf.	kate. M m, m p ss, m gm.
*djacwe. Gs, sb gs, ggs.	*matiswi. Gd, sb gd, ggd.

Four terms, at times self-reciprocal, denote the gp. Usually these terms are not self-reciprocal, but take instead two terms which denote gs and gd, respectively. These two terms are also employed for offspring. \*Kegu, the term of reference for ch, is also used for gch.

*Sibling Class*

*gide (address), gi' (reference). O b, o /b.	*eku. Y sb, y /sb.
*deki (address). O ss, o /ss.	

<sup>40</sup> Present series, vi, 56, 57, 1908.

*Uncle Class*

- |                |                |
|----------------|----------------|
| *bate. F o b.  | *djeke. F y b. |
| mute. F ss.    | *djute. M b.   |
| *cute. M o ss. | *ceki. M y ss. |
- \*kegu. Np, nc (reference). The usual terms of address for offspring are also employed.

*Cousin Class*

- |                            |                                       |
|----------------------------|---------------------------------------|
| *gide. F b o s, m ss o s.  | *kegu. F ss ch (reference). The usual |
| *deki. F b o d, m ss o d.  | terms for offspring are applied in    |
| *djute. M b s.             | address.                              |
| *eku. F b y ch, m ss y ch. | *ceki. M b d.                         |

*Step-relation Class*

Here there is the usual identification of stf with f y b, and of stm with m y ss, with reciprocals to correspond. Stsb equal sb.

*Spouses of Uncles and Aunts*

- |                            |  |
|----------------------------|--|
| *cute. F b w older than m. | *kegu. H b ch, w ss ch (reference). In |
| *ceki. F b w y than m.     | address the usual terms for offspring  |
| *magoda. F ss h.           | are also employed.                     |
| *cutki. M b w.             | *wiaha. W b ch, h ss s.                |
| *bate. M o ss h.           | *padi. H ss d.                         |
|                            | *djeke. M y ss h.                      |

The sp of xu and xa are denoted by sbl terms, and reciprocate in kind. Over a considerable area in California it is customary to call the f ss h bl, so there is nothing unique in the Central Pomo doing so. They are, however, exceptional in calling the m b w ssl. This custom possibly savors of matrilinear influence, although it also recalls the analogous Hupa custom, which is scarcely under the suspicion of being the result of matrilinear influences.

*Spouse Class*

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| kebaya. H; said to mean "my mn."      | kemata. W; said to mean "my wm."  |
| djaiyun. H; said to mean "old mn" and | matula. W; said to mean "old wm." |
| to be used rarely.                    | kedakat. W.                       |

Cw employ ss terms on the basis of priority of marriage.

*Parent-in-law Class*

- |                           |                                 |
|---------------------------|---------------------------------|
| *mibe. Pl, chl (address). | maiya. Dl (address).            |
| üpa. Pl (reference).      | teolyube'. Dl (reference).      |
| teaiyima. Fl (address).   | maiya. Sl (address).            |
| matulma. Ml (address).    | teyim, teeyibe. Sl (reference). |

The pl sb are called pl and reciprocate with the terms for chl. The dl sb are called dl whether they are ♂ or ♀. Similarly, the sl sb are called sl whether they are ♂ or ♀. For the reciprocal relation of sb sp p, pl terms are employed.

*Grandparent-in-law Class*

Relatives of this class are merged in the gp class.

*Sibling-in-law Class*

\*wiaha. W sb, h b.

\*magoda. Ss h.

\*cutki. B w.

\*padi. H ss.

My w ss h is called fl if he married first, sl if I married first. Similarly my w b w is called ml if she married first, dl if I married first. She reciprocates in kind to me, her h ss h, calling me sl if she married first and fl if I married first. H b w is ml if she married first, dl if I married first.

*Child's Parent-in-law*

This relative is addressed by the term of respect, mibe, employed by pl and chl, but is referred to by the special terms kemaca and imadjumi.

MI and fl taboos are said to be operative. The levirate, w ss marriage in case of the death of the w, w b d marriage, and xc marriage of the Miwok type<sup>41</sup> are all said to be practiced.

## NORTHERN POMO

Three wm furnished the data for this system. All were erstwhile residents of Round Valley reservation, Mendocino county. One, Anna Crabtree, was from Little Lake, another, Minnie Scott, from Sherwood, and the third, Jennie Frank, from the head of Ten-mile river.

*Parent Class*

me'edai. F (address).

\*ghawidai. S (address).

ame'e. F (reference).

keghawi. S (reference).

tedai. M (address).

\*panidai. D (address).

ate. M (reference).

apani. D (reference).

*Grandparent Class*

badai. F f (address).

tsadai. M f (address).

aba. F f (reference).

atsa. M f (reference).

madai. F m (address).

kadai. M m (address).

ama. F m (reference).

aka. H m (reference).

djutidai. Gch (address).

adjuti or amadjuti. Gch (reference).

Gp sb and ggp are designated by gp terms according to their sex and according to whether the connecting p is the f or the m.

*Sibling Class*

\*gidai. O b (address).

\*tidai. Y sb (address).

agi'. O b (reference).

ati'. Y sb (reference).

\*dedai. O ss (address).

ade. O ss (reference).

*Uncle Class*

\*djedai. F b (address).

\*ghawidai. B s, wm ss s.

adje. F b (reference).

\*panidai. B d, wm ss d.

\*mudai or wudai. F ss (address).

\*cuwahondai. Mn ss s (address).

\*amu or awu. F ss (reference).

\*teamandai. Mn ss d (address).

\*tsudai. M b (address).

\*sudai. M o ss (address).

atsu. M b (reference).

asu. M o ss (reference).

\*cedai. M y ss (address).

ace. M y ss (reference).

<sup>41</sup> To the m b d.

*Cousin Class*

*gidai. O ♂ //c.	*tidai. Y //c.
*dedai. O ♀ //c.	*ghawidai. Wm f ss s.
*tsudai. M b s.	*panidai. Wm f ss d.
*cedai. M b d.	*cuwahondai. Mn f ss s.
	*tcamandai. Mn f ss d.

Mrs. Anna Crabtree, a wm with a remarkable insight into the Northern Pomo kinship system, furnished the following data on the descendants of xc:

The ♂ descendants of m b through ♂ are denoted by the term for m b and reciprocate with the terms for mn ss ch. Similarly the ♀ descendants of m b through ♀ are denoted by the term for m y ss and reciprocate with the terms for wm ss ch.

The ch of m b d are designated by sb terms. Since all of m b ♀ descendants through ♀ are equated to m y ss, it follows that their ch are designated by sb terms. Thus not only do m b d ch equal sb but so also do the ch of m b s d, of m b s s d, of m b s s s d, and so on *ad infinitum*.

Since f ss s is denoted by np terms, his ch is called gch and reciprocates with the terms for paternal gf and gm. Similarly the ch of f ss d is called gch and reciprocates with the terms for maternal gf and gm. In other words, a ch calls its p m b ch (p xc through their m b) by gp terms, since its p denote these relatives by maternal u and a terms.

A wm designates her f ss ch as though they were her ss or her own. Because of this, the ch of a wm denote their m f ss ch by sb terms. The ch of these ch they denote by np-ne terms as they would their real sb ch. The last two groups of ch who apply ne-np and u-a terms to each other are actually second c, and therefore in the same generation.

As already pointed out, m b s s and m b s d are denoted respectively by the terms for m b and m y ss. Individuals thus denoted reciprocate with the four terms for sororal np and nc. Going a step farther then, the ch of these individuals who are called sororal np and nc are therefore denoted by the term for gch. We thus find in this last example second c who employ gp-gch terms.

*Step-relation Class*

Here there is the customary union with a and u: Stf equals f b, stm o than m equals m o ss, stm y than m equals m y ss. The stch are naturally merged in offspring. Stsb are denoted by sb terms.

*Spouses of Uncles and Aunts*

*sudai. F b w o than m.	*ghawidai. H sb s, w ss s.
*cedai. F b w y than m.	*panidai. H sb d, w ss d.
*tsudai. F ss h.	*cuwahondai. W b s.
*mudai or wudai. M b w.	*tcamandai. W b d.
*djedai. M ss h.	

*Spouse Class*

bahan. H (reference).  
busa. H (address). The term means  
"old mn."

kedahan. W (reference).  
data. W (address). The term means  
"old wm."

Cw is denoted by a ss term.

*Parent-in-law Class*

busanama. Fl (address).	amoonama. Dl (address).
atda. Fl (reference).	amoon or columa. Dl (reference).
datanama. Ml (address).	amidjenama. Sl (address).
acanama. Ml (reference).	adjeje. Sl (reference).

The terms of address for fl and ml are based respectively on the words for "old mn" and "old wm."

Pl sb and sb pl are denoted by pl terms according to their sex. Conversely a sb chl is called chl according to sex, but a chl sb is called by the term for chl regardless of the sb sex. Thus a dl b, as well as a dl ss, is called dl and a sl ss is called sl as well as a sl b.

*Grandparent-in-law Class*

Relatives of this class are merged in pl and chl.

*Sibling-in-law Class*

awimaha. W b.	ghondai. Ss h, h b (address).
cutidai. W ss, b w (address).	aghon. Ss h, h b (reference).
acuti. W ss, b w (reference).	micibanidai. H ss.
kekanema. Means "friend" and is used in referring to w ss h, w b w, h ss h, h b w.	
In address sb terms are employed.	

*Child's Parent-in-law*

This relative is denoted by the exclusive term amaho.

The Ten-mile River informant said that the levirate and w ss marriage were practiced, but that there was no change in terminology following the death of a connecting relative. She also stated that the sl fed his dead w p as well as his ch. The Little Lake informant stated that the levirate was operative at times, that w ss marriage was practiced, of which she gave an example in the family, and that w b d marriage also occurred.

## SOUTHWESTERN POMO

This system was secured from three wm living at Stewart's Point, on the coast of Sonoma county. They were Mrs. Julia Marrufo, Mrs. Mary Samuels, and Mrs. Celestina Scott. Mrs. Scott's f was from the village of Muteawi and her m from the village of Meteni, near Fort Ross.

*Parent Class*

bebe. F. According to Mrs. Scott this form is used only by a y person; an adult says abe.	
tete. M. According to Mrs. Scott an adult says ate.	
*pakin. S.	*pankin. D.

*Grandparent Class*

*baban. F f, f p b, f gf.	kakan. M m, m p ss, m gm.
*maman. F m, f p ss, f gm.	*xaden. Gs, sb gs, ggs.
tatan. M f, m p b, m gf.	*xademen. Gd, sb gd, ggd.

*Sibling Class*

\*gigin. O b, o/b  
 \*digin. O ss, o/ss.

\*gun. Y b, y/b.  
 \*comen. Y ss, y/ss.

*Uncle Class*

\*baban. F o b.  
 \*djigin. F y b.  
 \*mumun. F ss.  
 \*dutun. M b. According to Mrs. Scott  
 this form is used by a y person; an  
 adult says djutsen.  
 cucun. M o ss.  
 \*xaden. Mn y b s, wm y ss s.

\*xademen. Mn y b d, wm y ss d.  
 \*pakin. Mn o b s, wm o ss s.  
 \*pankin. Mn o b d, wm o ss d.  
 \*cutgi. Wm b s.  
 \*cutgemen. Wm b d.  
 \*djutgi. Mn ss s.  
 \*djutgemen. Mn ss d.  
 \*cigin. M y ss.

*Cousin Class*

\*gigin. P o sb s.  
 \*digin. P o sb d.

\*gun. P y sb s.  
 \*comen. P y sb d.

At the time I visited Mrs. Scott there was a second or third c staying with her. This wm Mrs. Scott called y ss, because their gm, or ggm, were ss. Mrs. Scott's ancestress was o ss, the other wm was y ss. This relation has held and will continue to hold for all the descendants of these two original ss regardless of the relative ages of the descendants. All Mrs. Scott's ch now call all the other wm ch y sb regardless of relative age.

*Step-relation Class*

Stf equals f y b, stm equals m y ss. The reciprocals are the terms for offspring. Stsb equal sb.

*Spouses of Uncles and Aunts*

\*maman, F o b w.  
 \*cigin. F y b w.  
 \*dutun. F ss h. According to Mrs. Scott this  
 form is used by a y person; an adult  
 says djutsen.  
 \*mumun. M b w.  
 \*baban. M o ss h.  
 \*djigin. M y ss h.

\*xaden. H y b s, w y ss s.  
 \*xademen. H y b d, w y ss d.  
 \*pakin. H o b s, w o ss s.  
 \*pankin. H o b d, w o ss d.  
 \*djutgi. W b s.  
 \*djutgemen. W b d.  
 \*cutgi. H ss s.  
 \*cutgemen. H ss d.

*Spouse Class*

tak' in. H. Said to mean "my h." In address take is used.  
 kehibaiya. H. Said to mean "my mn."  
 kilekin. H. Said to mean "old mn."  
 giaci. Sp.  
 tamen. W. Said to mean "my w." In address tame is used.  
 keyimata. W. Said to mean "my wm."  
 kilemen. W. Said to mean "old wm."  
 katin. Cw. This term means "friend" and a gift of beads is made when the term is applied.



*Parent-in-law Class*

- |                                      |  |
|--------------------------------------|--|
| *kileya. Pl (address), pl sb, sb pl. | *mataiya. Dl (reference), sb dl, chl ss. |
| muya. Pl (reference), pl sb, sb pl.  | *baiya. Sl (address), sb sl, chl b.      |
| mata. Dl (address), sb dl, chl ss.   | *hibaiya. Sl (reference), sb sl, chl b.  |

Mica was said by Mrs. Scott to mean "your ml" and miba "your fl," while kileya is used only by a person of his own pl.

*Grandparent-in-law Class*

This class is completely merged in the pl class.

*Sibling-in-law Class*

Mrs. Marrufo and Mrs. Samuels gave the following classification of sbl:

- |                   |                       |
|-------------------|-----------------------|
| *mahan. W b, h b. | *mahamen. W ss, h ss. |
| *maghon. Ss h.    | *matamen. B w.        |

Mrs. Scott classified sbl as follows:

- |                              |                             |
|------------------------------|-----------------------------|
| *mahan. W b, h y b.          | *baiya. Wm y ss h.          |
| *maghon. Mn ss h, wm o ss h. | *matamen. Mn o b w, wm b w. |
| *kileya. W o ss, h o b.      | *mataiya. Mn y b w.         |
| *mahamen. W y ss, h ss.      |                             |

*Child's Parent-in-law*

The term djan seems to be limited exclusively to this relation.

The levirate, called miyahadjaha (said to mean "ssl marriage"), was practiced at times. Xc marriage was not.

## SOUTHERN POMO

The following kinship system was obtained from three informants. The striking feature of the system is that xc are classified in such a way as to indicate matrilinear influences.

*Parent Class*

- mede. F. The s is also addressed as mede at times.  
 tcede. M of an adult. The d is also addressed as tcede at times.  
 tete. M of a ch.  
 \*apakin. S. Sometimes he is addressed by the term mede, normally f.  
 \*apankin, ghamen, or aukeutu. D. Sometimes she is addressed by the term tcede, normally m.

// np and nc, who are denoted by the terms for s and d also, are never called f and m.

*Grandparent Class*

- |                              |   |                 |
|------------------------------|---|-----------------|
| *abatsin. Ff, f p b, f gf.   | akatsen. M m, m p ss, m gm.             |                 |
| *amatsin. F m, f p ss, f gm. | *kad'en (reference), kadeden (address). | Gs, sb          |
| *atcatsen. M f, m p b, m gf. |   | gs, ggs.        |
|                              | *kademde or kad'emen.                   | Gd, sb gd, ggd. |

*Sibling Class*

- \*amigin. O b, o /b.      \*unan or nadadu. Y sb, y /sb.  
 \*adigin. O ss, o /ss.

*Uncle Class*

- |   |                                |
|---|--------------------------------|
| *abatsin. F o b.  | *apakin. Mn o b s, wm o ss s.  |
| acutsen. M o ss.  | *apankin. Mn o b d, wm o ss d. |
| *kad'en (reference), kadeden (address). Mn y<br>b s, wm y ss s. | *amutsin. F ss.                |
| *kademde. Mn y b d, wm y ss d.                                  | *acutkin. Wm b ch.             |
| *adjigin. F y b.  | adjutsen. M b.                 |
| *acigin. M y ss.  | anugen. Mn ss ch.              |

*Cousin Class*

- |                             |                                       |
|-----------------------------|---------------------------------------|
| *amigin. F o b s, m o ss s. | *unan or nadadu. F y b ch, m y ss ch. |
| *adigin. F o b d, m o ss d. | *amutsin. F ss d.                     |
| *adjigin. F ss s.           | *acutkin. Wm m b ch.                  |
| *apakin. Mn m b s.          | *apankin. Mn m b d.                   |

In the case of the xc, the nomenclature (together with that of the neighboring Wappo) is unique for California. F ss d is called by the term for f ss and all of her ♀ descendants through ♀ are similarly designated. F ss s is called by the term for f y b, a term applied to all ♂ descendants of f ss through ♀. The reciprocal term applied by a wm to her m b ch is that which should normally apply to her b ch, since her m b ch calls her by the term for f ss. A mn, however, reciprocates to his m b ch with the terms for s and d which he would normally apply to his o b ch, since they address him as f y b.

We, therefore, have with the Southern Pomo a grouping of xc with paternal u and a and with fraternal nc and np. With other Pomo groups, the Wintun, Miwok, and Yokuts, xc are grouped on a similar principle, except that they are identified with the maternal u and a instead of the paternal, and with the sororal np and nc instead of the fraternal.

*Step-relation Class*

Stf equals f y b, stm equals m y ss. The stch are designated by the usual nepotic reciprocals which also signify offspring. Stsb are merged in sb.

*Spouses of Uncles and Aunts*

- |                      |                              |
|----------------------|------------------------------|
| *amatsin. F o b w.   | *kad'en. H y b s, w y ss s.  |
| *acigin. F y b w.    | *kademde. H y b d, w y ss d. |
| *amaghon. F ss h.    | *apakin. H o b s, w o ss s.  |
| *amutsin. M b w.     | *apankin. H o b d, w o ss d. |
| *atcatsen. M o ss h. | *awiktcai. W b s.            |
| *adjigin. M y ss h.  | *awiktamen. W b d.           |
|                      | *acutkin. H ss ch.           |

F o b w is denoted by the term for f m, which is in agreement with the fact that f o b is identified with f f. The reciprocals are the terms for gch. M o ss h is denoted by the term for m f and reciprocates with the gch terms. F ss h is designated by a bl term and reciprocates in kind. In this respect the Southern Pomo agree with numerous other Central Californian groups. I should have expected instead, in view of the curious xc terminology, that m b w would be called ssl.

*Spouse Class*

witkade (address) or awitgan  
(reference). H.  
giaci. Sp.

witakamde (address) or awitckamen  
(reference). W.  
hag'kan. Cw. This term is said to  
mean "friend."

*Parent-in-law Class*

hibatcidjole. Fl (address), pl b, sb fl.      mata. Dl (address), sb dl, chl ss.  
hibatciyai. Fl (reference), pl b, sb fl.      muidjole. Dl (reference), sb dl, chl ss.  
kimatidjole. Ml (address), pl ss, sb ml.      baiya. Sl (address), sb sl, chl b.  
kimatiyai. Ml (reference), pl ss, sb ml.      hibaiya. Sl (reference), sb sl, chl b.

*Grandparent-in-law Class*

Relatives of this class are merged with the pl and chl.

*Sibling-in-law Class*

\*awiktai. Sp b.      \*amaghon. Ss h.  
\*awikteamen. W ss.      matade. B w.  
awidatsmen. H ss.      g'ade. W ss h, h b w.

The w b w is called ml, the h ss h, sl.

*Child's Parent-in-law*

This relative is denoted by an exclusive term, adjan. According to Dr. Paul Radin, the Southern Pomo have the pl taboo. The levirate (miyaktaidjohon) was practiced. Xc marriage was not practiced. Terms of affinity are continued after the death of the connecting relative even though the survivor remarries. This statement was tested only for the sl relation, but presumably holds true for all affinities.

## YUKIAN

## WAPPO

Four informants living in the vicinity of Healdsburg, Sonoma county, were interviewed. In addition, Carl Sebastian, a Lake Miwok of Middletown, Lake county, gave me a Wappo list.

The Wappo have the ml tabu, as revealed by the investigations of Dr. Paul Radin.

*Parent Class*

aiya. F.      \*ek'a. S.  
na'a. M.      \*ek'abi. D.  
\*olo. Dead f; also f after death of ch, according to one informant.  
\*hama. Dead m. One informant gave newa for dead m. Hama was also given  
by one informant for m following the death of a ch.

*Grandparent Class*

*oca. F f, f p b, f gf.	*ecye. S ch, gs ch.
*bapa. F m, f m ss, f gm.	ekye. D s, gd s.
pits'a. M f, m f b, m gf.	ekyebi. D d, gd d.
diya. M m, m m ss, m gm.	tsata. M m b, mn ss d ch.
*bo'a. M f ss and perhaps f f ss. For these two relations, diya and bapa were also respectively applied.	*atsa. Wm m b d ch and perhaps wm b s ch.

*Sibling Class*

*epa. O b, o /b.	*yau. Y b, y /b.
*etsa. O ss, o /ss.	*yapi. Y ss, y /ss.

*Uncle Class*

*oca. F o b.	*ecye. Mn y b ch.
*olo. F y b.	*ek'a. Mn o b s, wm o ss s.
*bo'a. F o ss.	*ek'abi. Mn o b d, wm o ss d.
*atsa. Wm y b ch.	*yau. Wm o b s.
*etsa. F y ss.	*yapi. Wm o b d.
awa. M o b.	*ek. Y ss s.
ta'a. M y b.	ek'ebi. Y ss d.
paha. M o ss.	etcis. Mn o ss s.
*newa. M y ss.	etcisbi. Mn o ss d.

It is interesting to find that the Wappo, like the Southern Pomo, associate the f ss (f y ss only, in the case of the Wappo) with the older ss, in spite of the matrilinear classification of xc. Since the terminology for f ss is in agreement with that among numerous undoubtedly patrilinear groups in Central California, it seems reasonable to suppose that the matrilinear grouping of xc is of later origin than the identification of f ss with o ss.

*Parallel Cousins*

*epa. F o b s, m o ss s.	*yau. F y b s, m y ss s.
*etsa. F o b d, m o ss d.	*yapi. F y b d, m y ss d.

*Cross-cousins*

For f y ss ch and m o b ch conflicting answers were obtained, with the exception that all agreed on the terms for wm f y ss s and for the reciprocal relation of mn m o b d. This agreement is perhaps the key to the situation, for by it a wm f y ss s is identified with a wm f o ss s, and reciprocally a mn m o b d is identified with a mn m y b d. If these identifications hold, then it would seem to follow that the other xc through f y ss must be identified with those through f o ss, and that those through m o b must be identified with those through m y b. If such is the case, and there is a strong presumption that it is, the classification of Wappo xc reduces itself to the same matrilinear form as the Southern Pomo classification. Briefly, it is this:

F ss d equals f y ss, also o ss.	Wm m b d equals y ss.
F ss s equals f y b.	Mn m b s equals mn o b s.
Wm m b s equals y b.	Mn m b d equals mn o b d.

Carl Sebastian, the Lake Miwok who furnished me a complete Wappo system, gave sb terms for xc. These he said were applied according to the relative ages of the connecting p as are the //c terms. Later conference with Wappo informants proved Sebastian wrong. More than once I have noted that informants, ignorant of the true classification of c, have relegated to them sb terms. The case in point seems to be a clear example of a process of disintegration, or simplification, proceeding in Californian kinship systems.

\*etsa. F o ss d.

\*yau. Wm m y b s.

\*olo. F o ss s.

\*yapi. Wm m y b d.

\*ek'a. Mn m y b s.

\*ek'abi. Mn m y b d.

As indicated above, for the remaining xc the testimony is largely conflicting. The two cases (4 and 8 in the table below) in which all of the informants agreed would seem to indicate that the above six terms are all that are used and that really no cognizance is taken of the relative age of f ss or of m b. Such being the case, the above six terms, with the words "o" and "y" stricken from the definitions, would cover all of the xc. The following list presents the discordant data on the xc through f y ss and m o b.

	<i>Frances Tripo</i>	<i>Gertrudis Slocum</i>	<i>Martha McCloud</i>	<i>Harry Brown</i>
1. Mn f y ss d	etcisbi	etcisbi	bapa	etcisbi
2. Wm f y ss d	etsa	etsa	bapa	
3. Mn f y ss s	etcis	etcis	olo	olo
4. Wm f y ss s	olo	olo	olo	olo
5. Wm m o b s	ta'a	ta'a	ec	ta'a
6. Wm m o b d	yapi	yapi	ec	
7. Mn m o b s	ta'a	ta'a	ek'a	ek'a
8. Mn m o b d	ek'abi	ek'abi	ek'abi	ek'abi

### *Step-relation Class.*

The stf and stm are identified respectively with f y b and m y ss. The corresponding reciprocals denote the stch. St sb equal sb. The term \*hama is also applied to stm, apparently after the death of m.

### *Spouses of Uncles and Aunts*

\*bapa. F o b w.

\*eeye. H y b ch, w y ss ch.

\*newa. F y b w.

\*ek'a. H o b s, w o ss s.

\*etcti. F ss h.

\*ek'abi. H o b d, w o ss d.

\*bo'a. M o b w.

\*djiwa. W b s, h ss s.

demic. M y b w.

\*djiwabi. W b d, h ss d.

\*oca. M o ss h.

\*olo. M y ss h.

The h of both o and y f ss are denoted by a bl term and reciprocate in kind. It is clear that both f o and y ss are in this case treated as ss.

### *Spouse Class*

ewu. H (reference).

misig. W (reference).

hiya. Sp (address).

\*nok. Cw.

### *Parent-in-law Class*

\*emili. Fl, pl b, sb fl.

\*djina. Sl, sb sl, chl b.

\*potca. Ml, pl ss, sb ml.

\*ecebi. Dl, sb dl, chl ss.

*Grandparent-in-law Class*

This class is merged in the pl class, a gpl equaling a pl, a gehl a chl.

*Sibling-in-law Class*

*djiwa. Sp b.	*nok. W ss h, h b w. The term means "friend."
*djiwabi. Sp ss.	*potca. W b w if w b is o than speaker's w.
*etcti. Ss h.	*ecebi. W b w if w b is y than speaker's w.
ebuwis. B w.	*emili. H ss h if h ss is o than speaker's h.
	*djina. H ss h if h ss is y than speaker's h.

*Child's Parent-in-law*

An exclusive term (toak) was obtained for this relation.

## HUCHNOM

The Huchnom kinship system presented herewith was secured from two informants at Round Valley reservation, Mendocino county.

*Parent Class*

uñku. F.	kilka. Ch.
ûñka. M.	

*Grandparent Class*

iyos. F f, f p b, f gf.	ipe'. M f, m p b, m gf.
ipauñ. F m, f p ss, f gm.	ite'. M m, m p ss, m gm.
asumtee. S ch, sb s ch, gs ch.	ahumtee. D ch, sb d ch, gd ch.

*Sibling Class*

*uñke. O sb, o /sb.	*ica. Y b, y /b.
	*mutca. Y ss, y /ss.

*Uncle Class*

*ikika. F b.	*hokotcke. Mn b ch.
*ipoiyûm. F o ss.	*ipatcût. F y ss.
*iyauk. M o b.	*hutcaka. Wm b ch.
*uñkeka. M y b.	*hupume. Mn ss s.
*igûs. M o ss.	*omsa. Mn ss d, wm ss ch.
*ana <sup>n</sup> k. M y ss.	

C ch are classed as sb ch.

*Cousin Class*

*uñke. O c, o second c.	*ica. Y ♂ c, y ♂ second c.
	*mutca. Y ♀ c, y ♀ second c.

*Step-relation Class*

Stf equals f b; stm equals m y ss; and the reciprocals correspond. Stsb equal sb.

*Spouses of Uncles and Aunts*

*igus. F o b w.	*omsa. H b ch, w b d.
*ina <sup>a</sup> k. F y b w.	*hupume. W b s.
*iyauk. F o ss h.	*hutcaka. H ss ch.
*uñkeka. F y ss h.	*ikika. M ss h.
*ipoiyúm. M o b w.	*hokotke. W ss ch.
*ipateút. M y b w.	

*Spouse Class*

etiwap. H.

emusp. W.

Cw is denoted by a ss term according to relative age.

*Parent-in-law Class*

owelhelgeme. Fl, pl b, sb fl.

hewetgeme. Sl, sb sl, chl b.

emuspowehelgeme. Ml, pl ss, sb ml.

isutemgeme. Dl, sb dl, chl ss.

*Grandparent-in-law Class*

Relatives of this class are merged completely in the gp class.

*Sibling-in-law Class*

olaiyak. W b.

itawice. Wm ss h, h b.

itahai. Mn ss h.

inake. H ss.

hiyetca. W ss, b w.

W ss h and h b w are denoted by sb terms.

*Child's Parent-in-law*

This relation is denoted by the exclusive term iyu.

The levirate was practiced, apparently with regularity. Marriage to the w ss was also practiced, but apparently with less regularity than the levirate.

No change in terminology for p followed the death of a sb. The same is true following the death of a connecting relative. The continued use of the terms was said to be "on account of the ch." In the case of a wm death the ch were "fed" by her p as well as by their f. The f hunted and fished for his pl. They continued to call him sl even if he remarried. A mn was "always good to his w b on account of his ch." The w b as well as the w p aided in supporting them.

## YUKI

Although Dr. Kroeber has already presented a Yuki system in his "California Kinship System,"<sup>42</sup> it seems worth while to present certain of my data, as the inconsistencies encountered by Dr. Kroeber have been eradicated through consultation with five informants.

*Grandparent Class*asamapka<sup>a</sup>. S s, sb s s, gs s.amtca<sup>a</sup>tka<sup>a</sup>. D ch, sb d ch, gd ch.asamtca<sup>a</sup>ka<sup>a</sup>. S d, sb s d, gs d.<sup>42</sup> Present series, XII, 372, 1917.

*Sibling Class*

k'itc. O sb, o /sb.

la'n. Y b, y /b.

mu'n. Y ss, y /ss.

*Uncle Class*\*kai<sup>nt</sup>. F b.\*tca<sup>nt</sup>tka<sup>n</sup>. B ch.

\*p'oyam. F o ss.

\*pa<sup>nt</sup>tcet. F y ss.\*ai<sup>nt</sup>. M o b.

\*kikan. M y b.

\*ka<sup>nc</sup>. M o ss.

kup. Mn ss ch.

\*nai<sup>nt</sup>. M y ss.\*pimitcka<sup>n</sup>. Mn ss s.\*omsaka<sup>n</sup>. Mn ss d, wm ss ch.

C ch equal sb ch, since c equal sb.

*Cousin Class*

All c, both // and x, are denoted by sb terms which are applied according to relative age. Second c are similarly designated.

*Step-relation Class*

Stf equals f b, stm equals m o ss instead of m y ss, as is usually the case. The reciprocals correspond. Stsb are equated to sb.

*Spouses of Uncles and Aunts*\*ka<sup>nc</sup>. F o b w.\*nai<sup>nt</sup>. F y b w.\*ai<sup>nt</sup>. F o ss h.\*omsaka<sup>n</sup>. H b ch, w b d.

\*kikan. F y ss h.

\*pimitcka<sup>n</sup>. W b s.

\*p'oyam. M o b w.

\*pa<sup>nt</sup>tcet. M y b w.\*kai<sup>nt</sup>. M ss h.\*tca<sup>nt</sup>tka<sup>n</sup>. Sp ss ch.*Spouse Class*

tiwop. H.

tmusp. W.

wot. H. Said to mean "old mn."

ot. W. Said to mean "old wm."

*Parent-in-law Class*

owilkima. Fl, pl b, sb fl.

o'lan. A "nickname" for <sup>~</sup>ml.

wolam. A "nickname" for fl.

witikima. Sl, sb sl, chl b.

tmuspowilkima. Ml, pl ss, sb ml.

sutamkima. Dl, sb dl, ch, <sup>~</sup>lss.*Grandparent-in-law Class*

Gpl equal gp, and gchl equal gch.

*Sibling-in-law Class*

The four three-step relations are designated by sb terms.

*Child's Parent-in-law*

This relation is denoted by the exclusive term tcaiyl, which apparently is from the same source as Southern Wintun tcaiyl with the same meaning. As Central and Northern Wintun have no special term for ch pl, it seems probable that the Southern Wintun term may be of Yuki origin.



## COAST YUKI

My Coast Yuki data were obtained from Samuel Ray and Peter Bell, both born at Westport, on the coast of Mendocino county. Their m were ss. On the whole the Coast Yuki system has an abraded appearance as compared with other Yukian systems. This is particularly well shown in the u class, where but three terms are employed for the senior generation as against seven and eight in the other three Yukian systems.

*Parent Class*

te. P.

toste. S.

naiste. D.

*Grandparent Class*

ipik. F f, m p b, m gf.

ipep. F m, m p ss, m gm.

ios. M f, f p b, f gf.

idit. M m, f p ss, f gm.

asmam. Gch, sb gch, ggch.

In the application of the gp terms to collateral gp and ggp, a curious feature appears. The lines of descent are crossed and f gf and f p b are called by the term for m f. This rule holds for the remaining relations. A single informant, Samuel Ray, is responsible for this statement. There seems no reason to doubt him, as he is an exceptionally clear-headed old mn. A similar phenomenon is presented by the Kato kinship system.

*Sibling Class*

dike. O sb, o /sb.

elec. Y b, y /b.

mute. Y ss, y /ss.

*Uncle Class*

\*natein or lastein. F b.

\*weteme. Mn b ch.

\*betcek or nete (neet, inet). A.

\*asintce. Wm np.

kaha'. M b.

\*emsait. Wm nc, mn ss d.

i'pim. Mn ss s.

It is perhaps significant as to former more numerous u and a terms that the terms for f b and a have synonyms. On the other hand, the apparent synonyms may be only grammatical variations of a single stem.

*Cousin Class*

All c are denoted by sb terms which are applied according to the relative ages of the connecting p. Second c are denoted in like manner, the reckoning going back to the original pair of sb.

C ch are reckoned as sb ch.

*Step-relation Class*

Stf equals f b, stm equals a, and the reciprocals correspond. Stsb equal sb and are referred to as iskalakelka.<sup>43</sup>

<sup>43</sup> Perhaps this is the same as ixklakelka, said to mean "friend."

*Spouses of Uncles and Aunts*

*betcek or nete (neet, inet). U w.	*asintce. H sb s.
*natcin or lastcin. A h.	*emsait. H sb d.
	*weteme. W sb ch.

The w of an u (either f b or m b) is called a and the h of an a (either f ss or m ss) is called by the term for f b. It would seem logical to call f ss h by the term for m b, but that is not done.

*Spouse Class*

iduwap. H. Said to mean "my mn." itmusp. W. Said to mean "my wm."  
di'me. Sp.

Cw is denoted by a ss term according to age in relation to the speaker.

*Parent-in-law Class*

olawisteka. Fl, pl b, sb fl.	üwis. Sl, sb sl, chl b.
musoteka. Ml, pl ss, sb ml.	mus. Dl, sb dl, chl ss.

*Grandparent-in-law Class*

Relatives of this class are merged in the pl and chl.

*Sibling-in-law Class*

itaha. W b.	ixnane. Ssl.
eleye. Ss h, h b, h ss h. Apparently based on elec, y b.	
istpokum. W ss h; the term is said to mean "friend."	
ixklakelka. W b w; the term is said to mean "friend."	

The h b w is called by a ss term according to her age in relation to the speaker.

*Child's Parent-in-law*

This relative is denoted by the exclusive term tupcilka.

In reply to questions above the levirate, w ss marriage, and xc marriage, affirmative answers were received from Samuel Ray, the one informant questioned in this regard.

No change in terminology followed the death of a connecting relative or a sb. A widower was supposed to give meat and fish to his pl from time to time, even though he had remarried.

## PART. II

## COMPARATIVE ANALYSIS

In ultimate analysis a kinship system is an instrument of speech employed to express the biological relations existing between individuals.<sup>44</sup> This apparently inert and static mechanism, however, has been subject, through the whole course of human history, to the action of linguistic, social, and psychic factors; or perhaps it would be more correct if I said psychic factors alone, for linguistic and social factors operate upon a kinship system only through the mind. I use the word "social" here in a broad sense, referring not only to adjustments within the kinship system, to marriage customs for example, but also to the changes in the system brought about through contact with neighbors.

So far as the Californian material will permit I shall attempt to isolate some of the linguistic, social, and psychic determinants of kinship systems. I realize that the task is an ambitious one, for kinship terms probably have a much greater antiquity than most cultural features, for the reason that fundamentally they express biological as well as social relations.

## TYPES OF CLASSIFICATION AND THEIR DISTRIBUTION

## PARENTS

We have data concerning parents from all the eighty Californian tribes (including Cocopa) referred to in this paper. Only four diverge from the normal method of designating parents by two terms, namely, as father and mother. One of these divergent groups, the Coast Yuki (4c),<sup>45</sup> employs but a single term with the meaning "parent." The other three aberrant groups are the Yuma (15d), Mohave (15f), and Cocopa—all Yuman and all on the Colorado river in southeastern California and northeastern Lower California. These peoples employ

<sup>44</sup> This statement does not imply that I believe all kinship systems to have been originally identical. Even the closest biological relation may be expressed in several ways with equal truth, but with varying exactness; thus, parent, or father and mother, or man's father, woman's father, and mother; or, again, child, or son and daughter, or man's son, man's daughter, and woman's child.

<sup>45</sup> The numbers and letters in parentheses are those assigned to the various linguistic groups on the maps accompanying this portion of paper. The numbers are employed to aid the reader in locating the groups. The base map together with key list of tribes has appeared in A. L. Kroeber, *Elements of Culture in Native California*, present series, XIII, 259-328, map 1, 1922.

three terms for parents. One term denotes mother in the usual fashion, that is, without regard to the sex of the speaker. The other two are terms for father: one means "man's father," the other "woman's father."

It is perhaps significant that two other Yuman groups, the Southern and Northern Diegueño (15ba), have two terms for father, applied indiscriminately by either a man or a woman. From this one might infer that the Yuma-Mohave-Cocopa scheme is the ancient Yuman method of denoting parents and that, with the Diegueño, it has fallen into disuse. The absence of a second term for father in our sixth Yuman tribe, the Kamia (15c), is perhaps due to deficient data.

The occurrence of supernumerary terms for both parents is not infrequent. Sometimes these extra terms are employed non-vocatively. This is the case with the Shasta (6a), the Yurok (2a), the Salinan (13ab), the Yauelmani (part of 20b), the Gashowu (20d), and the Central and Northern Wintun (16ba). Possibly the two pairs of terms of the Esselen (12) represent vocative and non-vocative forms. The Washo (11) and the Mutsun (19e) have a third term which means parent. With several groups supernumerary terms were obtained for mother, but not for father. This is the case with the Hupa (1c), Whilkut (1e), Achomawi (6e), Tachi (part of 20b), and Chukchansi (20c). With the first three, the significance of the extra term is not clear; with the last two, it is a matter of address and reference, or, in other words, vocative and non-vocative.

The Kawaiisu (21f) and Tübatulabal (21g) employ paternal uncle and maternal aunt terms for parents following the death of a child. The Wappo (4d) do likewise for the father, but have a special term for the mother. Certain northwestern Californian groups employ circumlocutions in referring to departed parents. This practice will be discussed more fully in another section.

With the Wiyot (3), the term for mother also means daughter. A somewhat similar condition is found among the Eastern, Central, and Southern Pomo (10cbf), where there are in addition to terms meaning father, mother, son, and daughter, two terms of address meaning respectively father or son and mother or daughter.

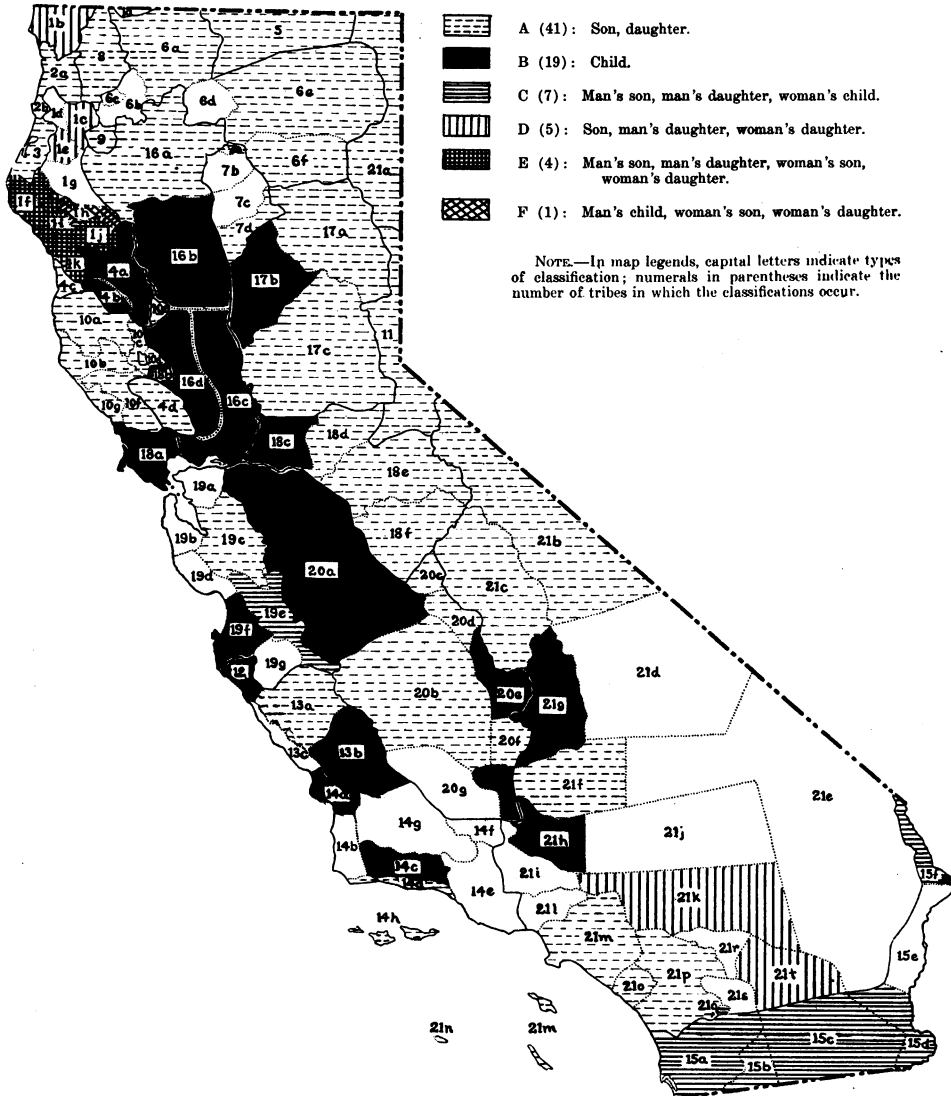
Among the Southwestern Pomo (10g), the terms for father and mother, and among the Southern Pomo (10g) the term for mother, are varied according as the speaker is a child or an adult. This is probably analogous to father and papa, mother and mama, in English.

It is not unlikely that in the matter of supernumerary terms our data are incomplete and that other groups may also employ them.

## CHILDREN

Map 1

With regard to the classification of children, we have information from seventy-eight peoples (including the Cocopa). By far the com-



Map 1.—Children.

monest method is to employ two terms for offspring, as among ourselves (type A). Forty-one follow this plan. Nineteen employ only

the term child and do not distinguish son from daughter (type B). Many groups employ three or four terms for offspring. Of these, eight groups classify children as man's son, man's daughter, and woman's child (type C). Five groups apply three terms as follows: son, man's daughter, woman's daughter (type D). Four Athabascan peoples in northern California group children as man's son, man's daughter, woman's son, woman's daughter (type E). A single group, the Lassik (1h), employs the classification: man's child, woman's son, woman's daughter (type F).

The distribution of these six types of classification is made clear by map 1. Type B (see map) is essentially a Penutian system of the Sacramento-San Joaquin valley. Type A lies in a compact body to the north and east of type B with detached fragments in the west and south, the two types intermixing in the south. Type A is found in six of the seven linguistic families of California, Athabascan being the only one without it. Type B is absent from three of the seven linguistic families, Athabascan, Algonkin, and Lutuamian. Although present in the other four, its distribution on the map seems to point to a Penutian origin.

The third type (C) of classification, employing three terms for offspring (man's son, man's daughter, and woman's child), is seen upon the map as a distinctive Yuman trait, in spite of its sporadic appearance among the Mutsun (19e). The fact that one Shoshonean people, the Cupeño (21q), follow this classification is but additional proof of Yuman origin, for the Cupeño are the close neighbors of the Northern Diegueño (15a). The Yuman Cocopa in Lower California follow this scheme too.

The fourth type (D) of classification is one in which the offspring are classed as son, man's daughter, and woman's daughter. The distribution is very curious. Three Athabascan groups, the Tolowa (1b), the Hupa (1c), and the Whilkut (1e), in northwestern California, and two Shoshonean groups, the Serrano (21k) and the Desert Cahuilla (21t), in southeastern California, follow this scheme. The wide separation of the two areas insures independence of origin.

The fifth type (E) of classification is peculiarly Athabascan so far as our Californian data go, although restricted only to the southern members of the family, the Mattole (1f), the Sinkyone (1i), the Wailaki (1j), and the Kato (1k). The peculiar feature of this type is the employment of four terms: man's son, man's daughter, woman's son, woman's daughter. I suspect that a closer study of Lassik (1h)

may reveal that it, too, belongs with this group instead of in an independent monotypic group (F) as at present. The peculiar feature of Lassik classification is that the children of a man are denoted by a single term, man's child, while for a woman's children two terms are used. Now in Wailaki, Kato, and Sinkyone the distinction between man's son and man's daughter lies, in the vocative forms, entirely in the possessive prefix *my*, which is *c-* for son, *s-* for daughter. It is entirely probable that the same elusive distinction will be discovered in the Lassik language.

The next feature to be considered is the extent to which these six classifications of offspring can be correlated with the classifications in the complementary class of parents. On the surface it would seem that the Mohave-Yuma-Cocopa (15) custom of classifying the parents as mother, man's father, and woman's father is in some way connected with the peculiar Yuman (15) classification of children discussed above. On the other hand, the Coast Yuki (4c) use of but a single term for parent seems to have no reflection in the terminology for children, which is quite normal.

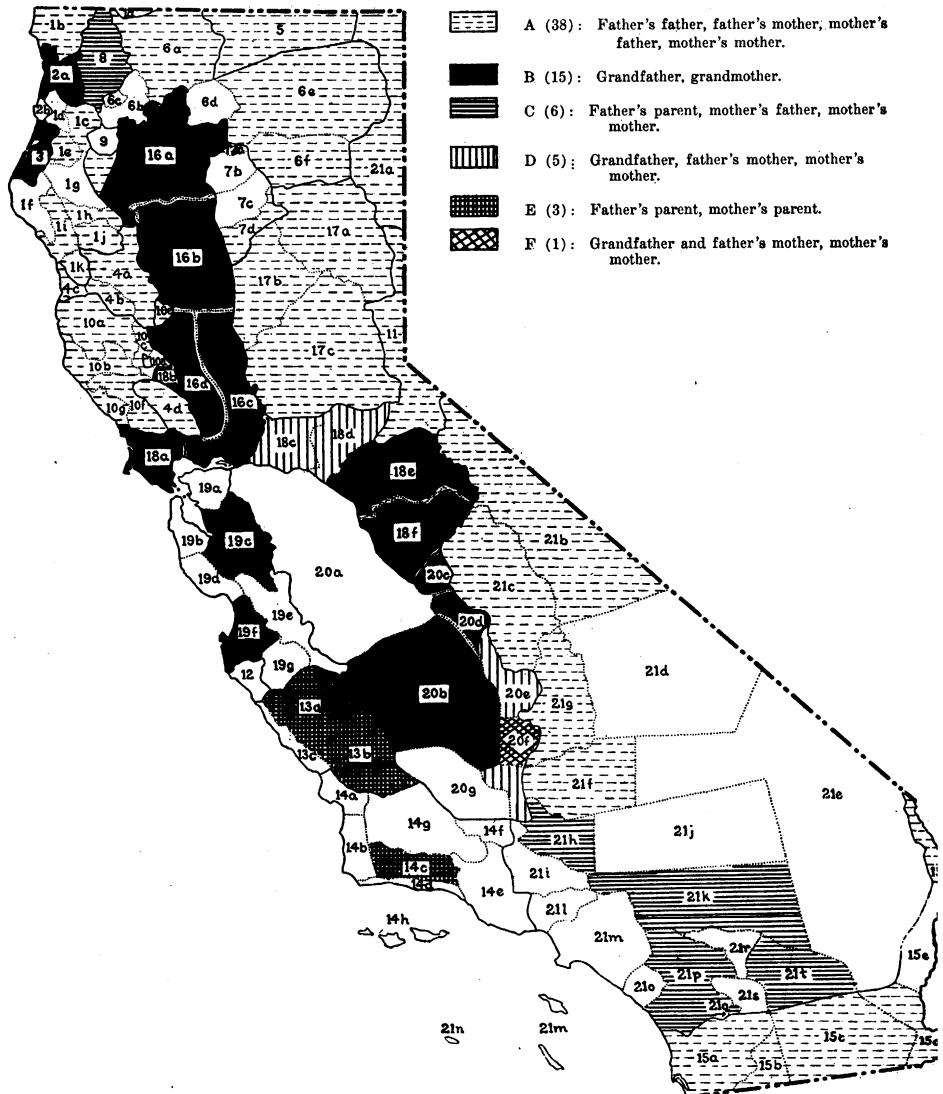
Finally, it should be noted that a marked characteristic of the eight Athabascan (1) and the six Yuman (15) systems obtrudes itself. All employ more than two terms for offspring.

## GRANDPARENTS

### Maps 2 and 3

There are six types of classification of grandparents in California, judging from the data available from sixty-nine tribes. By far the commonest type (A), followed by thirty-nine tribes (including the Cocopa), is to employ four terms: father's father, father's mother, mother's father, mother's mother. The next commonest type (B), utilized by fifteen groups, is that employed by ourselves, namely, two terms, denotative of grandfather and grandmother. The third (C) and fourth (D) types, employed respectively by six and by five tribes, are superficially a compromise between the first two methods, as three terms are employed. In the third scheme (C), these terms denote father's parent, mother's father, and mother's mother; in the fourth scheme (D), grandfather, father's mother, and mother's mother. The fifth type (E), used by three tribes, employs two terms meaning father's parent and mother's parent. The sixth type (F), used only

by the Paleuyami (20f), if the data are correct, unites grandfather and father's mother in a single term and employs a second term for mother's mother.



Map 2.—Grandparents.

As in the classification of children, map 2 shows a central longitudinal Sacramento-San Joaquin valley unit with a distinctive method (B) of classifying grandparents. In this case the classification has only Penutian adherents in the valley region. A second linguistic



family, Algonkin, however, also follows this plan. The Penutian area is three-quarters surrounded by tribes following type A. The hiatus lies to the west along the southern half of the central Californian coast. Type A is shared by six of the seven Californian linguistic families, Algonkin being the exception. This type is the only one employed by the Yukian (4), Lutuamian (5), and Athabascan (1) families. This leaves three families, Hokan, Penutian, and Shoshonean (21), which employ more than one type of grandparent designation.

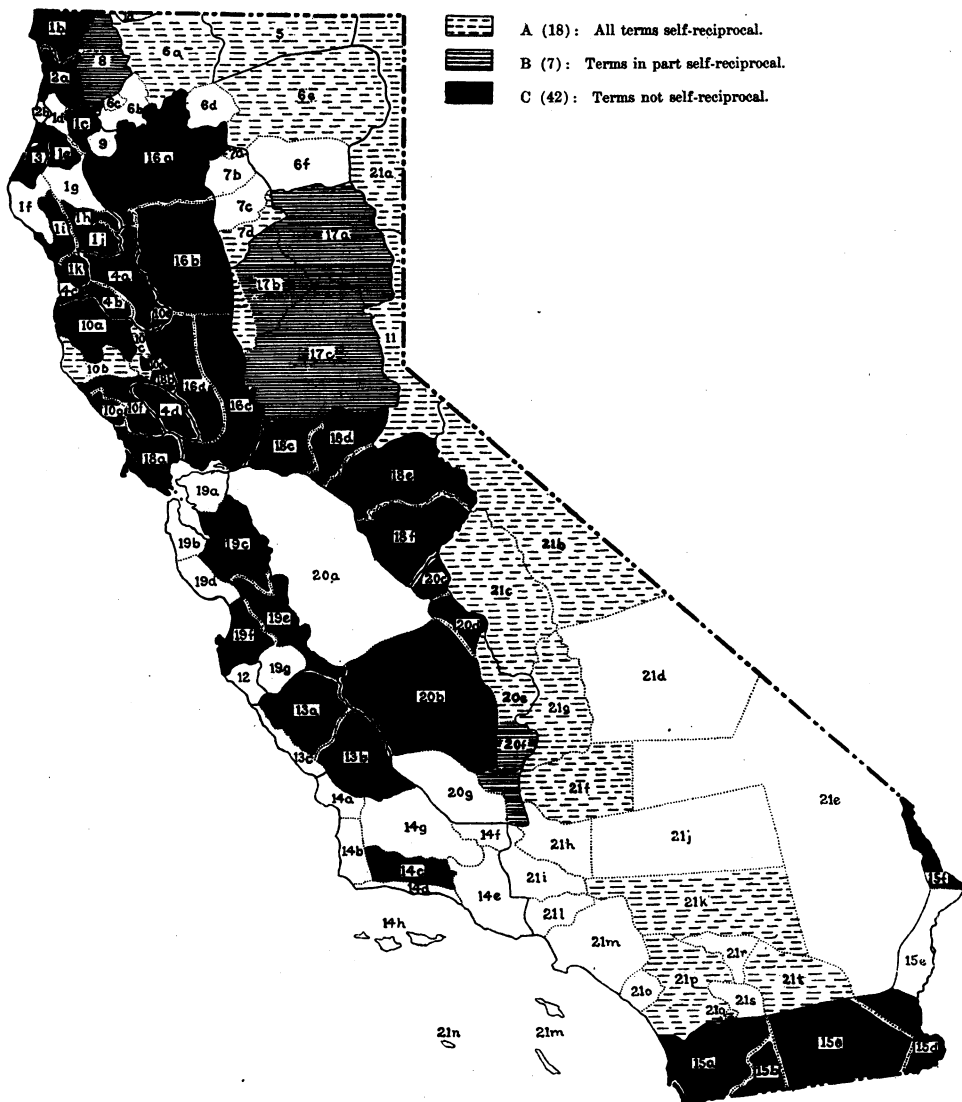
An inspection of the map seems to reveal an historic cause for the lack of unity in the Penutian family. To begin with, the three Maidu (17) groups as usual prefer the institution of their Shoshonean and Washo neighbors to that of their Penutian relatives. Their example has been followed in part, perhaps due to their influence, by two other Penutian groups (18cd), and a hybrid nomenclature (D) has resulted. The hypothesis of hybridism seems to be strengthened by the presence of type D in 20e and the southern part of 20b together with another hybrid variant in 20f, which I have designated as type F. These three Penutian groups, like 18cd, are sandwiched between groups adhering to types A and B respectively. The same remarks apply to the position of Northern Yana (7a), also an adherent of this hybrid type.

The third type (C) of nomenclature is distinctively a Southern California Shoshonean (part of 21) device, although it is also utilized by the Karok (8). There is clearly a line of cleavage here between the Southern California Shoshoneans on the one hand and the Plateau Shoshoneans and Tübatulabal (21g) on the other, for the latter adhere to the ubiquitous four-term type.

Type C is in outward appearance a hybrid of A and B and is probably actually such in the case of Karok, which is bordered by tribes using types A and B and has been largely influenced by them in other matters.

The fifth type (E) of nomenclature would perhaps prove to be distinctive of the southwestern culture area of California were our data from that region complete. As matters stand, it is found with two Salinan groups (13ab) and one Chumash group (14c). There is perhaps an intrinsic connection between types E and C, for both group the father's parents under a single term. It is not impossible that Chumash influence is responsible for this feature in Southern Californian Shoshonean.

The grandparent class is a particularly fertile field for verbal reciprocity, or self-reciprocity of the terms. By this I mean the practice of designating a grandchild by the term which the grandchild applies



Map 3.—Self-reciprocity in grandparent terms.

to the grandparent. In the following remarks I have included as wholly self-reciprocal the cases in which the terms for the junior generation take a diminutive suffix. Statistically the situation in California is as follows: Out of a total of sixty-eight tribes from which

data are forthcoming forty-three (including the Cocopa) have grandparent terms which are in no degree self-reciprocal; eighteen have grandparent terms which are entirely self-reciprocal; seven waver between these two extremes.

First, as to the eighteen tribes with all grandparent terms self-reciprocal. We find these distributed among the following major linguistic groups:

Shoshonean.....	9
Hokan.....	6
Penutian.....	2
Lutuamian.....	1

One hundred per cent of the Shoshonean tribes from which data are available follow this plan. Twenty-seven per cent of the Hokan groups do likewise, while 9 per cent show partial self-reciprocity, making a total of 36 per cent. Nine per cent of the Penutian groups follow the Shoshonean lead completely and 23 per cent partially, making a total of 32 per cent. Clearly the practice is a Shoshonean one, and, at best, a northern Californian Hokan one. Viewing the Hokan and Penutian families as wholes, it is certainly quite untypical. Inspection of map 3, as to the position of the seven Hokan and Penutian nations which have partial self-reciprocity, will reveal the fact that they are in almost every case buffer states, bordered on one side by tribes with total self-reciprocity and on the other by tribes with no self-reciprocity. Self-reciprocity in the grandparent class is totally lacking in the Athabascan (1), Algonkin, and Yukian (4) families. It has the appearance of an intrusive element in California.

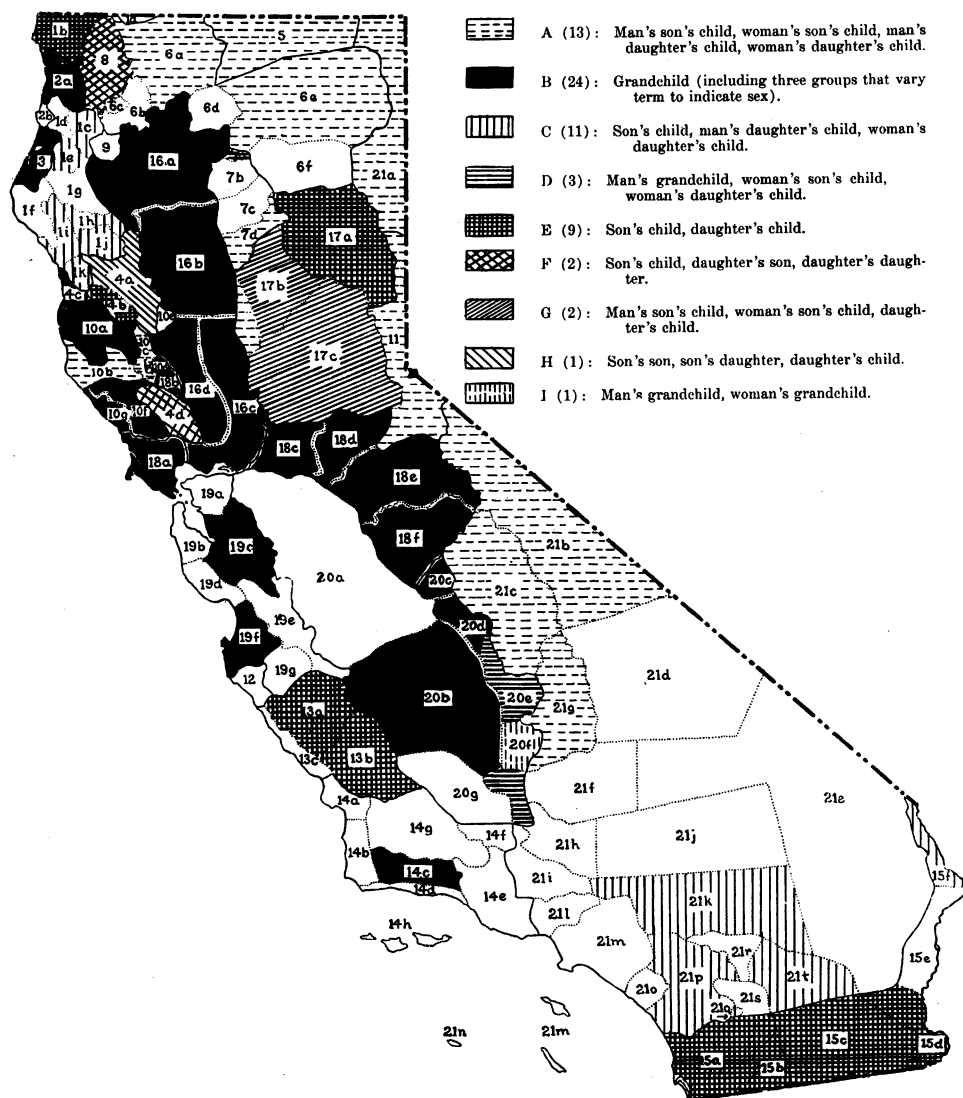
It should be noted, too, that self-reciprocity is never associated with the English type of grandparent terminology, namely, the terms grandfather and grandmother. These take cognizance of sex and age of the relative; self-reciprocal terms do not.

That self-reciprocity is not a psychological phenomenon connected with the use of four terms for grandparents is apparent from the fact that only fourteen tribes out of thirty-nine which employ four terms have self-reciprocity. That self-reciprocity is, however, essentially a Shoshonean product is apparent from the fact that all the Californian Shoshoneans have it, regardless of whether they employ four or three grandparent terms.

## GRANDCHILDREN

Map 4

Data as to the classification of grandchildren are available from



Map 4.—Grandchildren.

sixty-seven tribes (including the extralimital Cocopa). Map 4 shows the various types of classification and the tribes in which these occur.

Type A, with four terms all self-reciprocal, is confined largely to the northern and eastern mountainous portions of the state, except for its occurrence among the Northwestern Maidu of the plains (part of 17b), and among the Eastern and Central Pomo (10be). In these two Pomo groups the terms for offspring are used alternatively. With the exception of the Penutian Maidu, it is limited to the Lutuami (15) and to Hokan and Shoshonean (21) peoples.

Type B, which employs the single term grandchildren and is the classification most like our own, is embraced by the usual Sacramento-San Joaquin valley kernel plus terminal extensions to the Santa Barbara region in the south and to the Klamath river in the north. Type B is essentially Penutian and Algonkin, with a few adherents, however, in the Hokan and Yukian families.

Type C, which is asymmetrical and recognizes son's child, man's daughter's child, and woman's daughter's child, is distinctively Athabascan (1) and Southern California Shoshonean (part of 21) in spite of the fact that one Athabascan tribe, the Tolowa (1b), does not follow it and that the Yuman Mohave (15f) do follow it. Comparison with map 2 reminds one that a similar asymmetry prevails in part in the Athabascan and Southern California Shoshonean classifications of children. Perhaps, however, the essential feature common to both child and grandchild classifications in these two groups is not so much asymmetry as it is a tendency to recognize the sex of the speaker, a tendency, however, which finds rather imperfect expression.

Type D, also asymmetrical and denoting man's grandchild, woman's son's child, and woman's daughter's child, is found in two widely separated areas. The Northern Yana (7a) employ it and so also do the Yauelmani (part of 20b) and Yaudanchi (20e).

Type E, employing but two terms—son's child and daughter's child—has a continuous distribution among the Yuman tribes (15) of San Diego and Imperial counties in southern California, and occurs sporadically elsewhere in the state. A variant of it occurs among the Cocopa (not included in our map), who alter the terms to indicate sex. The Yuman Mohave (15f) do not follow their congeners, but adhere to type C, which is essentially Southern California Shoshonean (part of 21).

Types F to I, each restricted to one or two tribes, are of scant importance and the reader is referred to the map for details of their character and distribution.

## GRANDPARENTS' SIBLINGS AND SIBLINGS' GRANDCHILDREN

Data concerning the grandparents' siblings, or collateral grandparents, are forthcoming from forty-two Californian groups. Although the information is not all that is to be desired, it is sufficient to show that there are fifteen or more varieties of nomenclature. A review of the series of forty-two groups reveals two polar extremes with a number of superficially, though probably not historically, intermediate varieties. One extreme is the type in which grandparents' siblings are denoted entirely by grandparent terms. This, the most popular method, is followed by twenty-eight groups,<sup>46</sup> with one exception, central and northern Californian. The type at the other extreme, represented only by the Lutuami (5), employs four special terms, in this case self-reciprocal, for the grandparents' siblings. Between these two extremes are thirteen groups representing eight different ways of denoting these relatives.

The first type, that which identifies the grandparents' siblings with the grandparents, is far from uniform. In the first place, as the grandparent classification varies, so must this vary. Some groups employ four terms, others three, others two. As a rule a grandparent's brother is identified with a grandfather, and, in groups where the sex of the connecting parent is considered, with due regard to that factor. Thus, father's parent's brother is identified with father's father, mother's mother's brother with mother's father, and so on. In certain instances, however, the principles of discriminating as to the sex of the relative and the sex of the connecting relative are flagrantly violated.

The first case to notice is that of the Achomawi (6e), who boldly call by grandfather terms the sisters as well as the brothers of grandfathers and call by grandmother terms the brothers as well as the sisters of grandmothers. The Coast Yuki (4c) have a still more curious custom of crossing the lines of descent in their designations for grandparents' siblings: mother's parent's brother equals father's father, mother's parent's sister equals father's mother, father's parent's brother equals mother's father, and father's parent's sister equals

<sup>46</sup> Tolowa (1b), Hupa (1c), Whilkut (1e), Lassik (1h), Wailaki (1j), Kato (1k), Yurok (2a), Karok (8), Achomawi (6e), Eastern Mono (21b), Western Mono (21c), Southern Diegueño (15b), Tachi (part of 20b), Chukchansi (20c), Southern Miwok (18f), Central Miwok (18e), Northern Miwok (18d), Lake Miwok (18b), Central Wintun (16b), Southeastern Pomo (10d), Eastern Pomo (10c), Central Pomo (10b), Northern Pomo (10a), Southwestern Pomo (10g), Southern Pomo (10f), Huchnom (4b), Yuki (4a), Coast Yuki (4c).

mother's mother. Both the Coast Yuki and the Kato (1k) cross the lines of descent in like fashion in designating great grandparents. This is an exceedingly pretty case of diffusion of a trait, for it seems highly improbable that such a rare trait should arise independently in two neighboring groups. As to the group in which it arose there can be no certainty, but presumably the Coast Yuki were the originators, since they cross the lines of descent for both great grandparents and collateral grandparents, while the Kato cross the lines only for the former.

Of the eight mixed methods of grouping grandparents' siblings, only two are employed by more than single tribes; one by five tribes, the other by two. The former, used by the Northern Diegueño (15a) and four Southern California Shoshonean groups, the Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), and Luiseño (21p), denotes grandparents' siblings of same sex as connecting grandparent by grandparent terms. Thus, a grandfather's brother is called by a grandfather term, a grandmother's sister by a grandmother term. Grandparents' siblings differing in sex from the connecting grandparent, that is, grandfather's sister and grandmother's brother, are denoted by one or two terms which are utilized in other classes of relatives.

The method employed by two tribes, the Yuma (15d) and the Cocopa, consists of denoting all grandparents' brothers by a term usually employed for step-father and of denoting all grandparents' sisters by a special term. The Wiyot (3) use variants of their two grandparent terms. The Wappo (4d) have a mixed system consisting chiefly of grandparent terms plus a special term and the term for father's older sister. The Shasta (6a) unite the grandfathers' brothers with the grandfathers, but employ non-grandparent terms for grandmother's brother and grandparent's sister. The Yahi (7d) use grandparent terms, a cross-cousin term, and the term for mother's brother. The Mohave (15f) designate grandmothers' sisters as grandmothers, but denote grandmother's brother by a special term. The Kamia (15c) identify all grandparents' siblings with man's parent-in-law.

Siblings' grandchildren form the group which is complementary to the grandparents' siblings treated in the preceding pages. A distribution map is hardly necessary for the junior group of relatives, nor is much discussion needed. The terms employed are, of course, all reciprocal to those employed for grandparents' siblings. Naturally, therefore, where a grandparent or uncle term is used in that

class, a grandchild or nephew-niece term will be used in this. In many instances the terms employed are self-reciprocal, as, for example, in Lutuami (5), Southern California Shoshonean (part of 21), Shasta (6a), Achomawi (6e), etc. One group requires especial mention, however, as it employs a unique term for sibling's grandchild and great grandchild. That group is the Wiyot (3), who, it will be recalled, use variants of their grandparent terms in designating grandparents' siblings.

#### GREAT GRANDPARENTS AND GREAT GRANDCHILDREN

##### Map 5

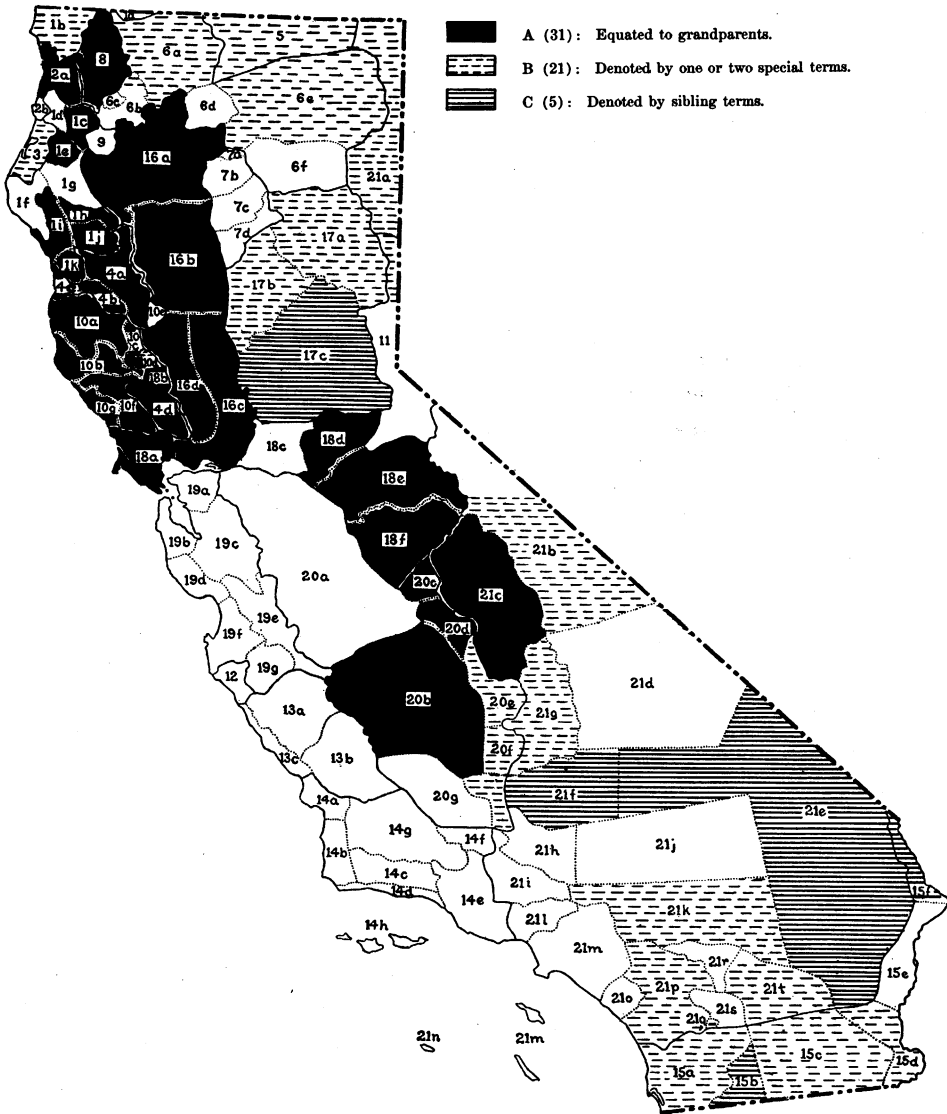
The three methods of classifying great grandparents in California are distributed among fifty-seven tribes as shown on map 5.

A glance at map 5 shows type A, in which great grandparents are equated to grandparents, to be distinctive of the great valley of central California and to have extensions in northern California. Type B, which employs special terms, has a somewhat shrunken peripheral distribution in northeastern California, the southern Sierra Nevada region, and southern California. Type C, which employs sibling terms, occurs sporadically in north central California (Southern Maidu, 17c) and at the Mexican border in San Diego county (Southern Diegueño, 15b). I am informed by Mr. John P. Harrington that the Chemehuevi (21e), who occupy the territory between the Kawaiisu (21f) and Mohave (15f), also possess this trait in common with these two tribes, thus making our third area one of considerable magnitude, stretching from the Tehachapi mountains in the west to the Colorado river in the east.

The exact form which the great grandparent terms take in type A is determined, of course, by the grandparent terminology of each group. Thus, in a four-term tribe, father's grandfather equals father's father, father's grandmother equals father's mother, and so on, with reciprocals to correspond. In tribes with only two grandparent terms the great grandfather is equated to the grandfather. Similarly, the three-term tribes equate the great grandparents to the grandparents after their particular vogue. The only exception to this harmonious scheme is found in Kato (1k) and Coast Yuki (4c), which employ the normal four grandparent terms but cross the lines of descent in designating great grandparents and great grandchildren by these terms. This matter has already been referred to in the section on grandparents' siblings (p. 134).



Of groups which follow type B, seventeen employ self-reciprocal terms; three do not. Information is incomplete for the remaining three (Tolowa, 1b; Northeastern Maidu, 17a; and Northern Paiute, 17a).



Map 5.—Great grandparents.

21a). Of the seventeen groups with self-reciprocal terms fourteen use single terms: Achomawi (6e), Northwestern Maidu of the plains (part of 17b), southern branch of the Eastern Mono (21b), Tübatulabal (21g), Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), Luiseño

(21p), Paleuyami (20f), Yauelmani (part of 20b), Yuma (15d), Kamia (15c), Northern Diegueño (15a), and Cocopa. In the case of the Cocopa, Kamia, and Yuma it appears likely that the term is varied to indicate sex. The Northwestern Maidu of the mountains (part of 17b), the Shasta (6a), and the Yaudanchi (20e), each employ two self-reciprocal terms. The Maidu reciprocity is not conceptual, however, for great grandfather and great grandson are designated by one term, great grandmother and great granddaughter by the other. It is interesting to note that, aside from the Yuman tribes, these seventeen groups with self-reciprocal terms all have total or partial self-reciprocity in the grandparent class.

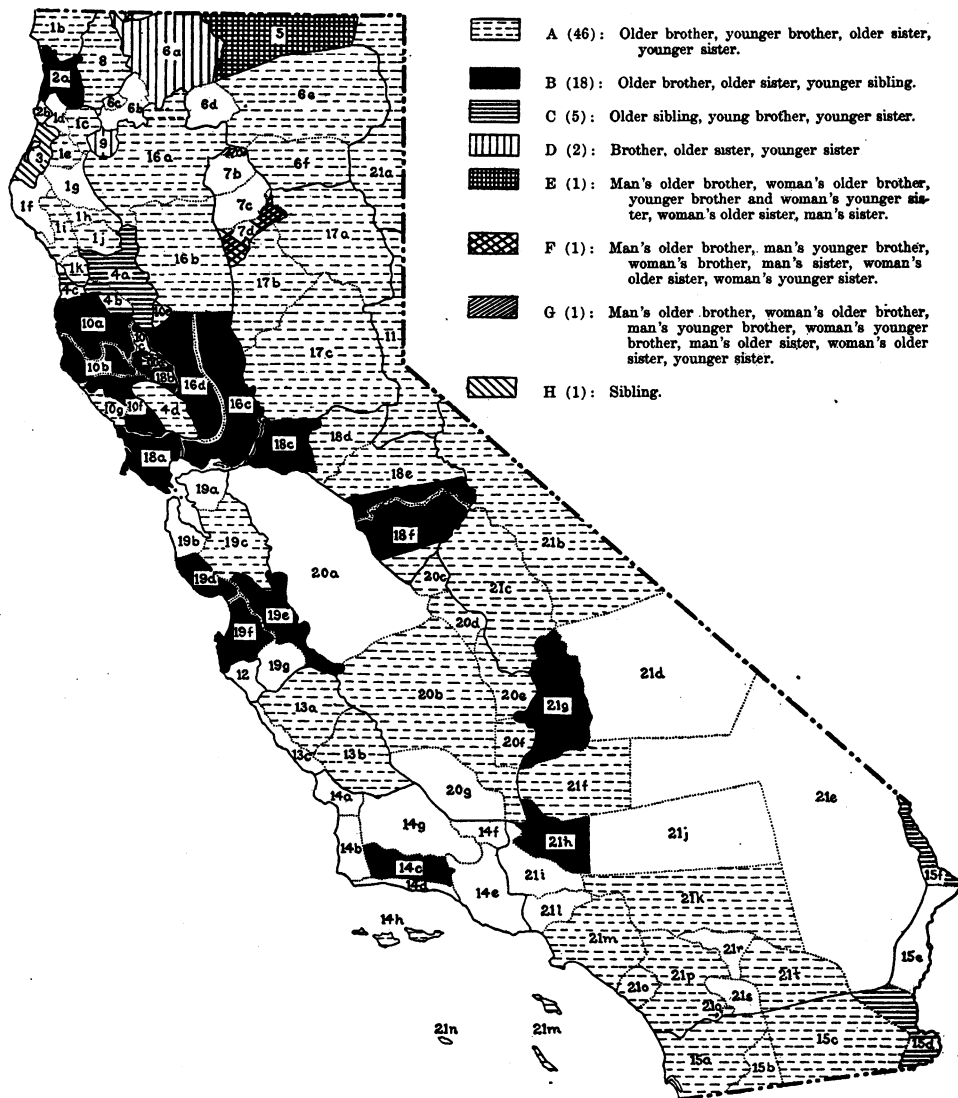
The three groups without self-reciprocal terms are the Lutuami (5), the Southeastern Pomo (10d), the Wiyot (3). The Lutuami and Wiyot each employ a special term as the junior reciprocal. The Southeastern Pomo employ the term for grandchild, although, at times, the great grandparent terms are used self-reciprocally.

We have already enumerated the groups employing sibling terms. It remains to point out, however, that there are two methods of using them. The Southern Maidu (17c) and the Southern Diegueño (15b) identify the great grandparents with the older siblings, the great grandchildren with the younger siblings. The Kawaiisu (21f) and the Mohave (15f) do the reverse, designating great grandparents as younger siblings, great grandchildren as older siblings. Among the Desert Cahuilla (21t) and the Cupeño (21q) sibling terms are employed in the Maidu-Diegueño fashion for great great great grandparent-grandchild. For the preceding series, great great grandparent-grandchild, a self-reciprocal term is employed. This is true also for the same relatives in Luiseño (21p), Yuma (15d), and Yauelmani (part of 20b). The Yuma and Luiseño have self-reciprocal terms for great great great grandparent-grandchild, and the Luiseño for great great great great grandparent-grandchild. The meanings of some of the terms for these remote relatives are curious. The two Yuma terms mean respectively, "hair on my leg" and "my toe nails." The Yauelmani term means "something which one points out to you, but which you cannot see." In the same connection it should be noted that the self-reciprocal Achomawi term for great grandparent means "my ear."

## SIBLINGS AND HALF-SIBLINGS

Map 6

There are eight methods in all of designating siblings, employing from one to seven terms, as revealed by data from seventy-six peoples.



Map 6.—Siblings.

Five methods are negligible, however, as each, with one exception, is found in but a single group. The three principal types of designation

are divided among seventy tribes (including the extralimital Cocopa) as shown on map 6.

The most widespread method (A) of denoting siblings employs four terms: older brother, younger brother, older sister, younger sister. The two types (B and C), employing three terms each, appear to be reductions from the more prevalent four-term scheme. Especial force is lent to this statement by the fact that all the stocks represented in the three-term types are also represented in the four-term type with the exception of Algonkin. Shoshonean (21), Costanoan (19), Miwok (18), Wintun (16), Pomo (10), Chumash (14), Yuman (15), and Yukian (4) all employ both three and four terms. Frankly, however, in the case of Yukian the facts rather favor an original three-term system, shared now by the contiguous Yuki (4a), Huchnom (4b), and Coast Yuki (4c), from which the Wappo (4d) have diverged by manufacturing a fourth term through the use of a feminine suffix.

The only adherents to the Yukian type of designation are the Mohave (15f) and Yuma (15d) of the Colorado river. I believe that no genetic relationship underlies the Yukian and Yuman similarities, however. The Mohave-Yuma terminology would appear to be an indigenous specialization, as our four other Yuman groups (Cocopa included) follow the general four-term scheme.

There seems to be also a case in which a three-term system of type B has become a four-term system of type A. The Pohonichi or southernmost Southern Miwok (part of 18f) use four terms for siblings, while their northern neighbors of the same dialect (Yosemite Miwok) use but three (older brother, older sister, younger sibling). A comparison of terms clarifies the situation:

	<i>Older brother</i>	<i>Older Sister</i>	<i>Younger brother</i>	<i>Younger sister</i>
Pohonichi	tatci	tete	iti	üta
Yosemite Miwok	tatei	tete	ate	ate

Iti, Pohonichi for younger brother, is etymologically related to ate, Yosemite Miwok for younger sibling, but is restricted to younger brother in meaning. Üta, Pohonichi for younger sister, is undoubtedly intrusive, for in other Miwok dialects it means mother. Here, then, seems to be a clear case of a three-term scheme becoming four-term by introducing a fourth non-sibling term.

Viewed categorically, type A with four terms takes cognizance of both sex and age in generation. Types B and C with three terms recognize sex only partially but take full cognizance of age in generation. Thus, for the entire state, age in generation seems to be more important than sex in the denotation of siblings.

Map 6 again brings out the central Californian valley kernel of Penutian tribes as type B, in this case somewhat shrunken and mutilated, owing to the unusually large encroachments of the peripheral type A. The encroachments of type A are somewhat compensated for, however, by the spilling over of type B into Pomo (10), Shoshonean (21), and Chumash (14) territory as in preceding maps.

Another point of interest in sibling classification is the use of supernumerary terms, very frequently non-vocatively. Vocative forms do occur and a good example is a term used self-reciprocally between a brother and a sister. Supernumerary terms have been recorded from sixteen peoples (Tolowa, Yurok, Karok, Shasta, Achomawi, Atsugewi, Yahi, Northeastern Maidu, Southeastern Pomo, Southeastern Mono, Western Mono, Tübatulabal, Yaudanchi, Paleuyami, Yauelmani, Serrano), although doubtless several more employ them. For example, I believe that further inquiry will show the Northeastern Mono (21b) and the Northern Paiute (21a) to employ them like the remainder of the Mono (21bc).

Of the tribes with supernumerary sibling terms, we find fifteen grouped in two clusters, one in northern California, the other about the southern Sierra Nevada, Tehachapi, and San Bernardino mountains. If, as I suggest above, the Northeastern Mono and the Northern Paiute prove to employ supernumerary terms, the two clusters will be united by way of western Nevada. The sixteenth tribe, the Southeastern Pomo (10d), is isolated.

The sixteen tribes known to use supernumerary terms are distributed among the linguistic families as follows:

Hokan.....	6
Shoshonean.....	4
Penutian.....	4
Athabaskan.....	1
Algonkin.....	1

I suspect that the trait is largely a Hokan and Shoshonean one and that its adoption by four Penutian groups may well be another instance of diffusion, especially since the four Penutian groups in question (Northeastern Maidu, 17a; Yaudanchi, 20e; Paleuyami, 20f; Yauelmani, part of 20b) are the ones which most commonly share various traits with their Shoshonean (21) neighbors. Penutian (geographically Sacramento-San Joaquin valley) systems on the whole incline most to a small number of terms, of which the absence of supernumerary sibling terms seems to be additional evidence.

Almost everywhere in California, so far as our data go, half-siblings are denoted by sibling terms. The Wiyot (3), the Mohave (15f), and the Yuma (15d) are the only groups which diverge from this well-nigh universal custom. The Wiyot do so only in a half-hearted fashion. They designate paternal half-siblings (half-siblings by a common father) by a special term, but the maternal half-sibling (half-siblings by a common mother) by the ordinary sibling term. The Yuma and the Mohave employ two terms, one for paternal, the other for maternal, half-siblings.

#### UNCLES AND AUNTS

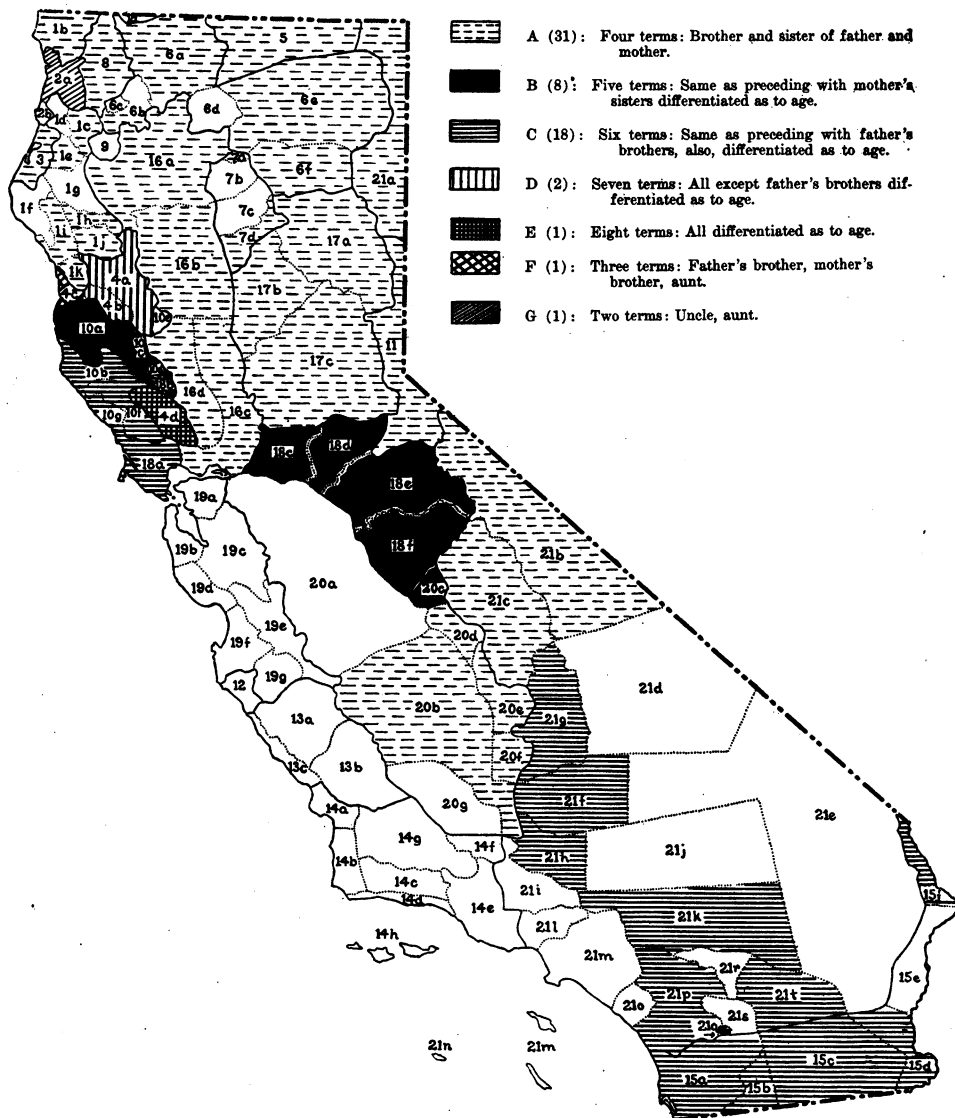
##### Maps 7-10

Data concerning uncles and aunts were obtained from sixty-three groups, demonstrating the presence of seven<sup>47</sup> systems of classification, mapped and listed on map 7. Superficially type A, with four terms denoting father's brother, father's sister, mother's brother, mother's sister, appears as the original and fundamental type from which all of the others have been derived by reduction and accretion. This tentative hypothesis should be borne in mind as we proceed with the discussion. Although the reductions are not demonstrable, certain of the accretions, at least, can be readily detected, as when, for example, the term for father's father is used for father's older brother. This phenomenon is closely allied to another, which is quite widespread and will be discussed later, namely, the employment of terms of relationship from other classes for the uncle-aunt relations of type A. Excellent examples of such borrowed terms are those for father, mother, and older sister. However, before we proceed to these more difficult matters we should examine the distribution of the seven types.

Type A is by far the most generalized, if wide usage regardless of linguistic boundaries counts for anything. Yukian is the only one of the seven linguistic families of California that does not use this scheme. Athabascan (1) and Lutuamian (5) employ it exclusively; Algonkin, Hokan, and Penutian in generous measure but not wholly. It is *par excellence* a central and northern Californian scheme, being totally lacking in southern California.

<sup>47</sup> A doubtful eighth is recorded from the Kitanemuk (21h). The normal Southern California Shoshonean scheme is to employ six terms: father's older brother, father's younger brother, father's sister, mother's brother, mother's older sister, mother's younger sister. The Kitanemuk diverge from this scheme by using but a single term for mother's sister. I am inclined to suspect an omission from the list, and hence have tentatively included and mapped the Kitanemuk with the other Southern California Shoshoneans.

Type B, which resembles type A except that mother's sisters are differentiated as to age, is employed by certain Pomo groups (10ad and part of c), the Sierra Nevada and Plains Miwok (18cdef), and



Map 7.—Uncles and aunts.

the Chukchansi (20e). The restriction of type C (see below) in central California to Pomo and Miwok groups and the total restriction of type B to Pomo, Miwok, and Yokuts groups is undoubtedly indicative of a close relationship between these two types of nomenclature, as I

hope to show later. Type C in southern California is probably not genetically connected with type C in central California, except in so far as both may be developments from an original four-term scheme.

Type C, with six terms due to the differentiation of father's brothers and mother's sisters as to age, prevails among the Shoshonean (21) and Yuman (15) groups of southern California (including the extralimital Cocopa). It is also used by two Miwok groups (18ab) and certain of the Pomo groups (10fg and part of c) on the coast immediately to the north of San Francisco.

Type D, with seven terms, represents a further development along the line laid down by types B and C, namely, the distinction of aunts and uncles according to their age in relation to the connecting parent, for type D differentiates all but father's brothers as to age. Type E reaches the maximum of development in that line, all being differentiated as to age and eight terms employed. Types A to E form a series in which the number of terms employed is constantly augmented: type A has four terms, type B five, type C six, type D seven, and type E eight. Type D is employed by the Huchnom (4b) and the Yuki (4a); type E is used solely by the Wappo (4d). Thus it would appear that a multiplicity of uncle-aunt terms is a distinctive Yukian trait. The Coast Yuki (4c), however, are not to be included in this formulation, for they show a reduction of terms below the ubiquitous four, instead of an increase. They employ but three terms (fathers' brother, mother's brother, and aunt) and form our type F.

Type G, like E and F, is monotypic and is restricted to the Algonkin Yurok (2a). The curious feature of the scheme is that, like English, it employs but two terms, one meaning uncle, the other aunt.

I wish next to examine the types of classification having more than four terms with a view to isolating the obvious accretions.

The distinctive feature of type B is the employment of two terms for mother's sister, one denoting mother's older sister, the other mother's younger sister. Of the eight groups which adhere to this scheme, but two, the Pohonichi, or southernmost Southern Miwok (18f), and the Chukchansi (20c), employ one of the terms in question in a more fundamental fashion. In Pohonichi and Chukchansi the term for mother's older sister also denotes mother. The other six groups all have distinctive terms for mother's older sister. The Pohonichi and Chukchansi terms therefore appear as accretions, and it seems possible that the uncle-aunt scheme in both of these tribes may have been once a four-term scheme like that of the neighboring Yokuts



and Shoshonean tribes. Closer scrutiny reveals the fact that the Chukchansi employ two terms for mother, one of which denotes mother's older sister. The Pohonichi case is not so simple, however, for there has been an embarrassing and unexplainable interchange of terms, which perhaps vitiates our hypothesis. The normal Sierra Nevada Miwok (18def) word for mother (üta) is employed by the Pohonichi to denote the younger sister. This evidently left no choice but to seek a new term for mother. The fact that the Yosemite (Southern) and Groveland (Central) Miwok, who denote mother in normal Miwok style, both use the term ami for mother's older sister lends color to the alternative proposition that the Pohonichi have borrowed the aunt term for the mother, rather than the mother term for the aunt. The Chukchansi may have done likewise. In any event, the use of the term for mother to denote mother's older sister in two neighboring tribes speaking totally dissimilar languages would seem to be another case of diffusion of a trait similar to that already cited with the Kato (1k) and Coast Yuki (4c) in the discussion of grandparents' siblings.

In considering type C I should like first to examine the Pomo (10) and Miwok (18) groups of central California which follow this scheme, before undertaking an examination of the southern Californian groups. I remarked earlier the likelihood of an underlying connection between types B and C among the Pomo and Miwok. The four Pomo groups (10bfg and part of c) which follow type C differ from those which follow type B in that they distinguish father's older brother from father's younger brother. The term for father's older brother is plainly an accretion, however, for in each case it is simply the term for father's father. It will be noted in the last sentence that I tacitly attribute to the term in question a more fundamental use as a grandparent term than as an uncle term. In this I believe I am justified by the fact that four terms are employed in the seven Pomo languages for grandparents, while in but four cases is a term employed for father's older brother, and then it is always the term for father's father. Clearly, so far as the Pomo are concerned, type C is but a variation of type B. It is clear, too, that the Pomo are, so to speak, in a state of flux in this regard, and in many other respects also, as I shall show in a later section. In this connection it is significant that the Eastern Pomo dwelling north of Clear lake employ but a single term for father's brother, while those dwelling south of Clear lake utilize the handy grandfather term for father's older brother.

Turning now to the two Miwok groups (18ab) adjacent to the Pomo, we find that it is impossible to prove that the term for father's older brother is a recent accretion from some relationship class more fundamental than the uncle class. The same remark applies to the terms for mother's older and younger sisters in all the Pomo and Miwok groups which adhere to type C. The fact should not be overlooked, however, that the Wappo (4d), with eight terms for uncles and aunts, are neighbors of the Pomo and Miwok.

The Yuman (15) and Shoshonean (21) groups of southern California, the Kawaiisu (21f) of the Tehachapi mountains, and the Tübatulabal (21g) of the southern Sierra Nevada form a continuous chain of peoples who also follow the nomenclature designated as type C.. An examination of the data shows that in the case of the Southern California Shoshoneans (Kitanemuk, 21h; Serrano, 21k; Desert Cahuilla, 21t; Cupeño, 21q; and Luiseño, 21p) the term for mother's younger sister is of secondary origin, being based upon the term for mother. All other terms seem primary. In Mohave (15f) father's younger brother is denoted by the term for older brother. This is the only Yuman (15) case of clearly secondary origin for an uncle-aunt term. The Kawaiisu (21f) and Tübatulabal (21g) employ terms of apparently primary origin.

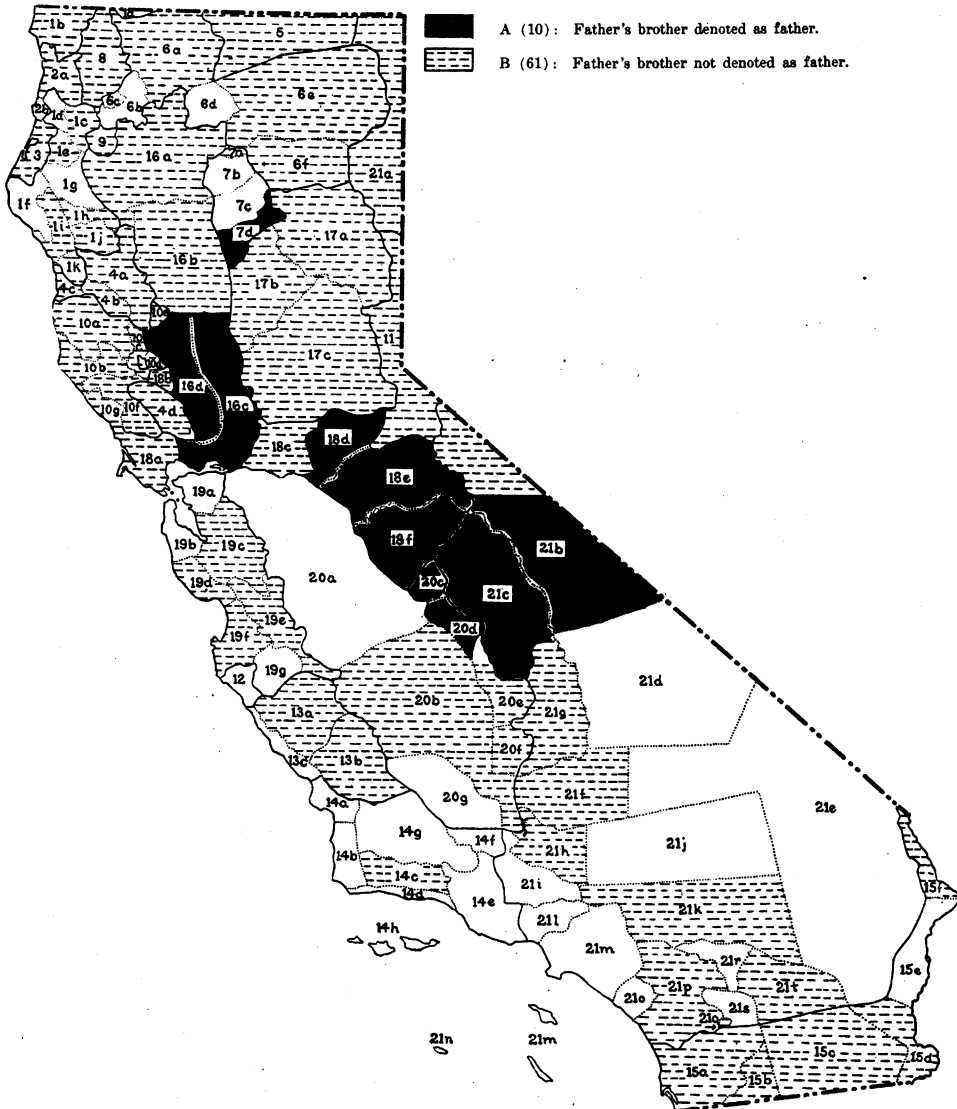
An examination of the Huchnom (4b), Yuki (4a), and Wappo (4d), schemes which constitute types D and E, is now in order. The seven terms employed by Huchnom and Yuki appear to be fundamental, or of primary origin, inasmuch as they are employed in no class of relatives less remote than the uncle class. In Wappo six of the eight terms are of primary origin. Two are derived from other classes of relatives: For father's older brother the term for father's father is employed as in certain Pomo (10) groups. For father's younger sister the term for older sister is utilized, a plan extensively followed in California, as we shall see presently.

Needless to say, the terms employed in types F and G, which have less than four terms, all appear to be of primary origin.

An examination into the customs of designating father's brother by the term for father, mother's sister by the term for mother, and father's sister by the term for older sister will now be undertaken.

*Father's Brother*

The designation of the father's brother by the term for father is of especial interest owing to its correlation with the levirate. Consid-



Map 8.—The denoting of father's brother as father.

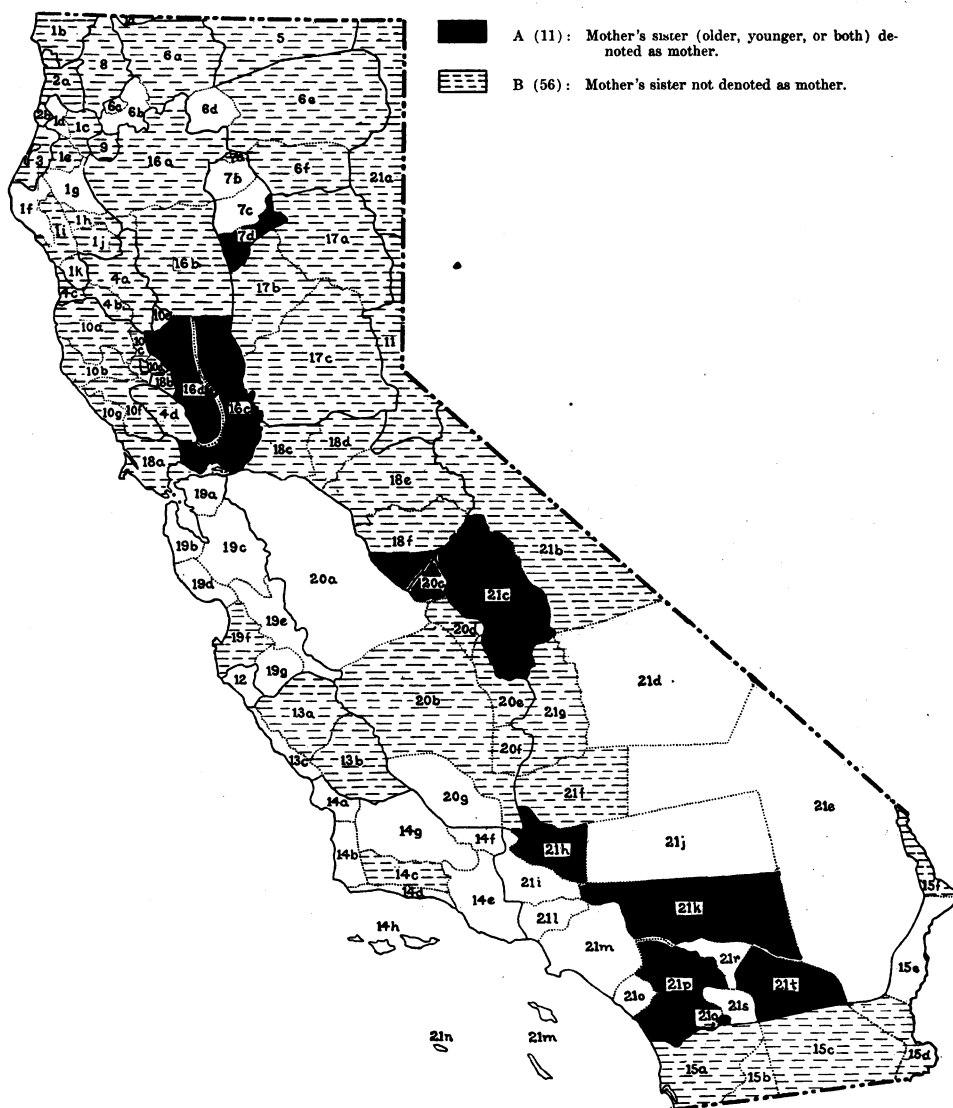
ering that the levirate is well-nigh universal in California, it is rather unexpected to find that only ten out of seventy-two groups (including

the Cocopa) designate father's brother by the term for father, in other words, about 14 per cent. An examination of map 8 will show that seven of these groups form a cluster in the southern Sierra Nevada. They are by no means a linguistic unit, however, for we find three Miwok (18), two Yokuts (20), and two Shoshonean (21) groups sharing this trait. One Shoshonean group, the southern Eastern Mono (part of 21b), adds a suffix to the term for father in applying it to father's brother. The northern Eastern Mono (part of 21b) employ a special term for father's brother. It is plain that the southern Eastern Mono have been more strongly influenced by their trans-Sierra congeners than by their adjacent northern kinsmen. The three remaining tribes which denote father's brother as father are in north central California. The Yahi (7d) are isolated and the northernmost. The Southeastern and Southwestern Wintun (16cd) are separated from the main cluster of seven tribes only by the Plains Miwok (18c), who follow the plan of the Coast and Lake Miwok (18ab) and employ a special term for father's brother. It is to be noted that all the tribes denoting father's brother as father fail to distinguish between father's older brother and father's younger brother, and hence belong to types A and B.

#### *Mother's Sister*

The denoting of the mother's sister as mother is a custom which has been correlated with the marriage of one man to two or more sisters, a form of marriage which accompanies the levirate. Four groups, employing but one term for mother's sister, identify her with mother. These are the Southeastern (16c) and Southwestern Wintun (16d), the Yahi (7d), and the Western Mono (21c), all belonging to type A. A fifth group, the Kitanemuk (21h), from whom our data are dubious, perhaps belongs here, but I have preferred to believe that they follow their linguistic allies, the Southern California Shoshoneans, in the employment of two terms for mother's sisters. This being the case, we have five groups (Kitanemuk, Serrano, Desert Cahuilla, Cupeño, Luiseño, 21hktqp) which employ the term for mother in modified form for mother's younger sister. These five tribes follow type C in designating uncles and aunts. Then in addition there are two central Californian groups, both followers of type B, employing two terms for mother's sisters, who denote mother's older sister by the

term for mother. These are the Chukchansi (20c) and the Pohonichi Miwok (part of 18f). Map 9 combines these three methods of employing the mother term for maternal aunts and visualizes the distri-



Map 9.—The denoting of mother's sister as mother.

bution of the use of that term as an aunt designation among eleven tribes. It likewise shows the fifty-seven tribes (excluding the Cocopa) which do not denote mother's sister as mother.

*Father's Sister*

A trait of far more interest than that of designating the father's brother as father or the mother's sister as mother is that of considering the father's sister as older sister. Complete data on this subject are at hand from fifty-four tribes. These data may be briefly summarized as follows:

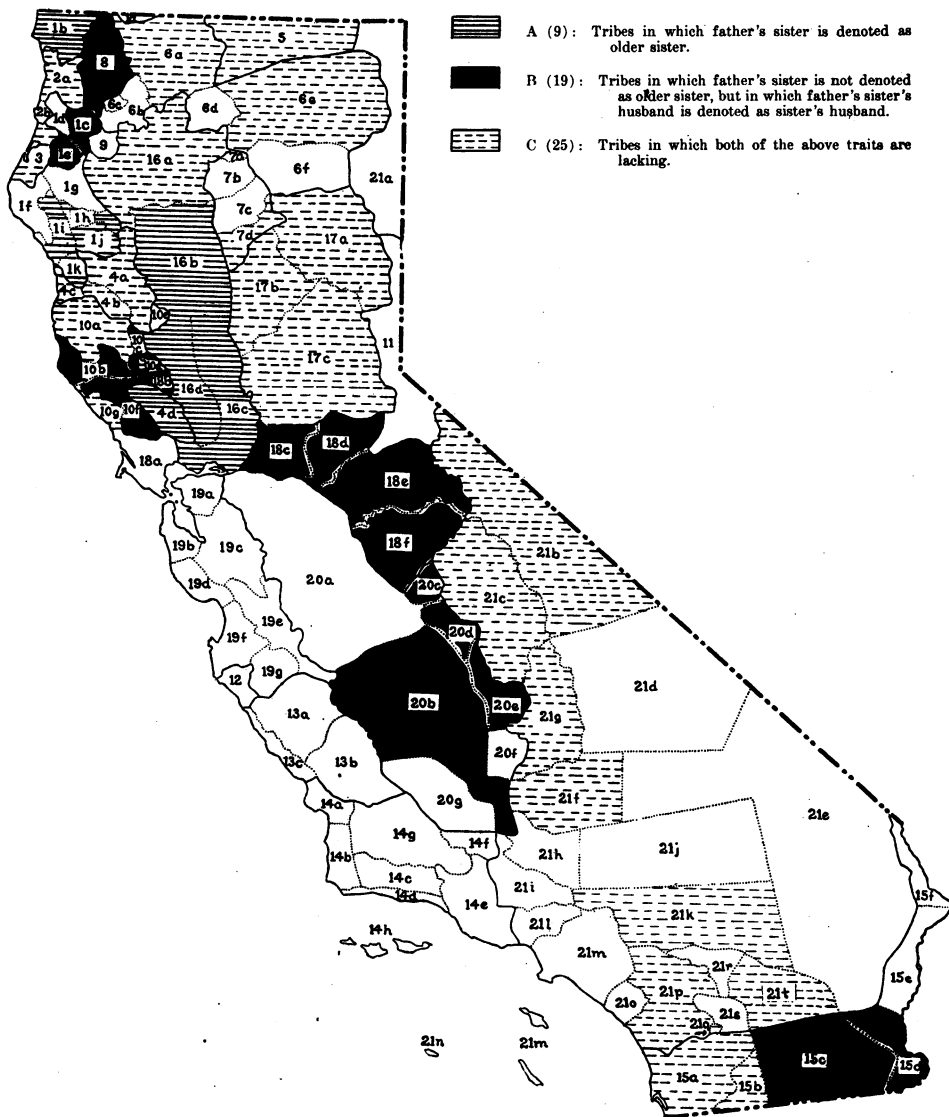
Tribes in which father's sister is denoted as older sister.....	9
Tribes in which father's sister is not denoted as older sister, but in which father's sister's husband is denoted as sister's husband .....	19
Tribes (including the Cocopa) in which both of the above traits are lacking .....	26

In other words, 52 per cent of the Californian peoples treat the father's sister as a sister in their relationship nomenclature. Map 10 shows the distribution of the three types of designation listed above. The two related traits which we are to discuss will be seen to have a continuous northwest-southeast distribution from the northwestern corner of the state southeasterly to the Tehachapi mountains. Then follows a hiatus with the secondary trait (that of designating father's sister's husband as sister's husband) reappearing in extreme southeastern California. The primary trait, that of calling father's sister by the term for older sister, is found only in northern California north of San Francisco.

Three linguistic families, the Lutuamian (5), the Shoshonean (21), and Algonkin (2 and 3), do not in any way recognize the father's sister as a sister. The Lutuamian are marginal and the Algonkin and Shoshonean largely extra-Californian, which makes our phenomena the more typically Californian.

Of the groups which designate the father's sister as older sister outright, five are Athabascan, three are Penutian, and one is Yukian. Three of the four Yukian groups in no way recognize the father's sister as sister, which would seem to indicate that the trait is of foreign origin with the fourth, the isolated Wappo (4d), a surmise which is strengthened when the propinquity of the Wappo to tribes manifesting both the primary and secondary traits is observed. The primary trait does, however, appear as typically Athabascan, as five out of seven groups designate the father's sister as sister and the remaining two designate the father's sister's husband as sister's husband. The

three Penutian tribes which have the primary trait are the South-eastern, Southwestern, and Central Wintun (16bed). All other Penutians (from whom data are forthcoming), with the exception of the



Map 10.—The equating of father's sister to sister.

Northern Wintun (16a) and the Maidu (17) who follow the lead of their Hokan and Shoshonean (21) neighbors, are content to adhere to the second trait only and thus to tacitly admit father's sister as sister by designating her husband as sister's husband.

The following Hokan tribes refuse to admit the father's sister as a sister in any form: Shasta (6a), Achomawi (6e), Yahi (7d), Cocopa, Southern Diegueño (15b), Northern Diegueño (15a), Northern Pomo (10a), and Southwestern Pomo (10g). The Karok (8), however, like their Hupa (1c) and Tolowa (1b) neighbors, designate father's sister's husband as sister's husband. This custom in extreme northwestern California is only an integral part of a more comprehensive scheme by which the spouses of all uncles and aunts are designated as siblings-in-law. The tribes following this plan of designation are the Hupa (1c), Whilkut (1e), Tolowa (1b), and Karok (8). A somewhat similar, but even more inclusive, scheme is followed by the Yuma (15d) and Kamia (15e) in southeastern California, who merge spouses of aunts and uncles in various other relatives by marriage.

It should be noted in conclusion that the equating of father's sister to sister either directly or indirectly is not associated exclusively with any one of the several types of uncle-aunt designation. A cursory comparison of map 10 with map 7 will make this clear. If our two traits, primary and secondary, however, are combined upon the map, the essentially Penutian, or Sacramento-San Joaquin valley, kernel appears, in this case with unusual territorial extensions into the northwest. This kernel again is bordered as usual by the peripheral mountain tribes who do not follow either the primary or the secondary scheme.

The Northern Wintun are unique in that they identify father's sister with grandmother both directly and derivatively. I think that the line of reasoning has been: father's sister equals mother's brother's wife equals grandmother. Their Hokan and Yukian neighbors identify father's sister with mother's brother's wife. Their southerly congeners identify mother's brother's wife with grandmother, and they, as well as their congeners, identify mother's brother with grandfather. Apparently they have combined the contributions of their neighbors, with the result, unparalleled in California, that father's sister is equated to grandmother. A halting and converse approach to this appears among the Tachi (part of 20b), Gashowu (20d), and Chukehansi (20e), with whom grandchild and woman's brother's child are designated by a single term.



### *Mother's Brother*

Of the four most frequent uncle-aunt terms (father's brother, father's sister, mother's brother, mother's sister), that for mother's brother is least often employed in, or derived from, other fundamental classes of relatives. We have passed in review and mapped such usages of the other three terms and it now remains to examine the case of mother's brother. Clearly secondary use of the term, as for father's sister's husband, I wish to pass over, as it is quite normal and will be discussed under the heading of Spouses of Uncles and Aunts.

In Southeastern and Southwestern Wintun (16cd), mother's brother is united with grandfather, mother's brother's wife with grandmother, and man's sister's child with grandchild. Incomplete data from the Rumsen and Mutsun (19fe) indicate a similar classification: uncle equals grandfather or mother's father, nephew equals grandson. These are the only outright identifications, but there are several cases of secondary identification through mother's brother's wife and through derived terms, which indicate the prevalence of the underlying idea. The fact that all of the tribes with secondary identifications are in juxtaposition to the Southern Wintun (16cd) suggests that the Southern Wintun may have been the originators of the trait. In any event they have the trait in its extreme form. The Trinity county Northern Wintun (part of 16a) identify the mother's father with the mother's brother and use a variant of the same term for father's father; grandchild is equated to man's sister's child; mother's mother to mother's brother's wife (equals father's sister). The remaining Northern Wintun (part of 16a) follow about the same scheme, but do not differentiate grandfathers. Grandfather is denoted by the term for mother's brother plus a suffix, grandmother by the term for mother's brother's wife (equals father's sister) plus a suffix. Grandchild is equated to man's sister's child. Central Wintun (16b) follows the same scheme. To the west, beyond the Wintun borders, we find the Lake and Coast Miwok (18ab) and the Southeastern Pomo (10d) equating mother's brother's wife to grandmother (Miwok) and to mother's mother (Pomo) with grandchild terms for reciprocals. It certainly seems likely that all these instances of incomplete identification are to be attributed to the leaven of Southern Wintun culture.

### *Self-reciprocity*

The classification of uncles and aunts in eleven out of sixty-one groups shows varying degrees of self-reciprocity as listed below:

- All terms self-reciprocal (Shasta, Kawaiisu).
- All terms except mother's brother self-reciprocal (Achomawi).
- Father's older brother and mother's older sister self-reciprocal (Serrano, Desert Cahuilla, Cupeño, Luiseño).
- Mother's brother and father's sister self-reciprocal (Yahi).
- Father's sister self-reciprocal (Lutuami).
- Mother's brother self-reciprocal (Tübatulabal).
- Mother's brother partly self-reciprocal (Karak).

Self-reciprocity in the uncle class is not nearly so intensive as in the grandparent class. A perusal of the preceding list shows it to be entirely limited to Hokan and Shoshonean groups and the Lutuami.

### NEPHEWS AND NIECES

Maps 11-14

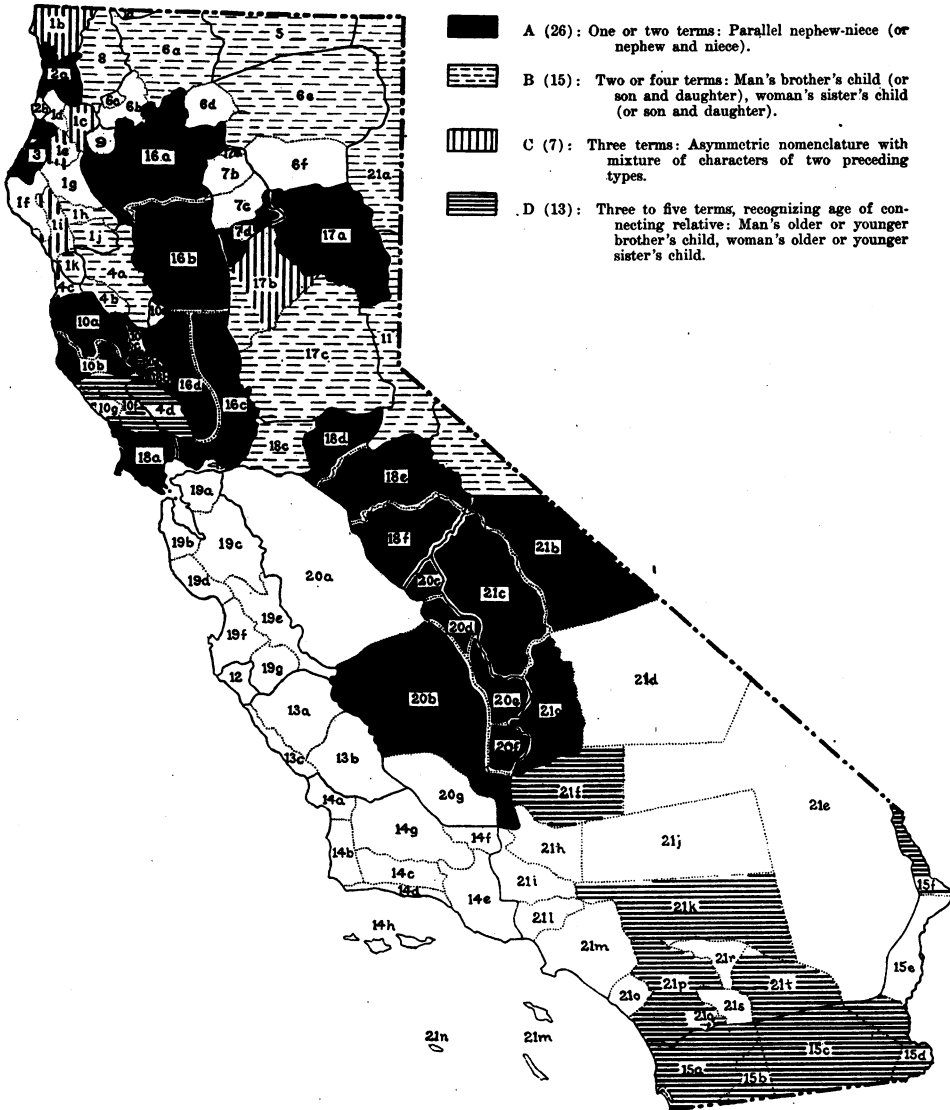
A review of our data on nephews and nieces reveals the appalling fact that, omitting the factor of self-reciprocity, there are thirty-five methods of classifying these relatives distributed among sixty-five tribes. In other words, each type of classification is employed on the average by less than two tribes. As a matter of fact there are actually twenty-four monotypic methods. It is clear, therefore, that we cannot treat the class as a whole, for the relationships and combinations of relationships within it are altogether too numerous to admit of ready formulation. Hence we shall first consider parallel nephews and nieces alone.

#### *Parallel Nephews and Nieces*

Full data on parallel nephews and nieces are forthcoming from sixty-two tribes (including the Cocopa) and reveal four general types of nomenclature, as shown on map 11.

Type A, which employs one or two terms meaning parallel nephew-niece, or parallel nephew and parallel niece, forms the usual Sacramento-San Joaquin valley kernel with extensions to the east and west. All of the tribes following type A, except Northern Wintun (16a), Wiyot (3), Yurok (2a), and Northeastern Maidu (17a), designate parallel nephews and nieces as offspring. Northern Wintun, however,

employs terms derived from those for offspring; Wiyot and Yurok use only the terms nephew and niece; and Northeastern Maidu uses only a single term, which means nephew-niece.



Map 11.—Parallel nephews and nieces.

Type B, which differentiates man's brother's children and woman's sister's children, is entirely limited to California north of the latitude of San Francisco. Except for its occurrence among the Yukian and

Athabascan tribes in the Coast Range, this method is largely peripheral in distribution so far as the political boundaries of the state are concerned, being found along its eastern and northern borders.

Type C, which occurs in three forms among seven tribes and consists of asymmetric nomenclature with mixture of the characters of the two preceding types, is found in five disconnected areas in northern California. This promiscuous distribution argues against a genetic connection for these three forms, except in so far as they may be abraded forms of type B.

Type D, employing three to five terms recognizing the age of the connecting relative, is exclusively southern Californian<sup>48</sup> save for a small area on the coast north of San Francisco. A comparison of the accompanying map (11) with that for uncles and aunts (map 7) will show that type D is the geographic as well as conceptual complement, in large measure, of type C of the uncle-aunt class. This unity is brought about by the recognition of the age of the connecting relative in the nomenclature. Other than this, only vague and general correlations are to be noted between the methods of classifying uncles and aunts, and nieces and nephews.

An examination of the various kinship systems reveals twenty-one out of seventy (counting Cocopa),<sup>49</sup> or exactly 30 per cent, which class parallel nephews and nieces as offspring (type A).

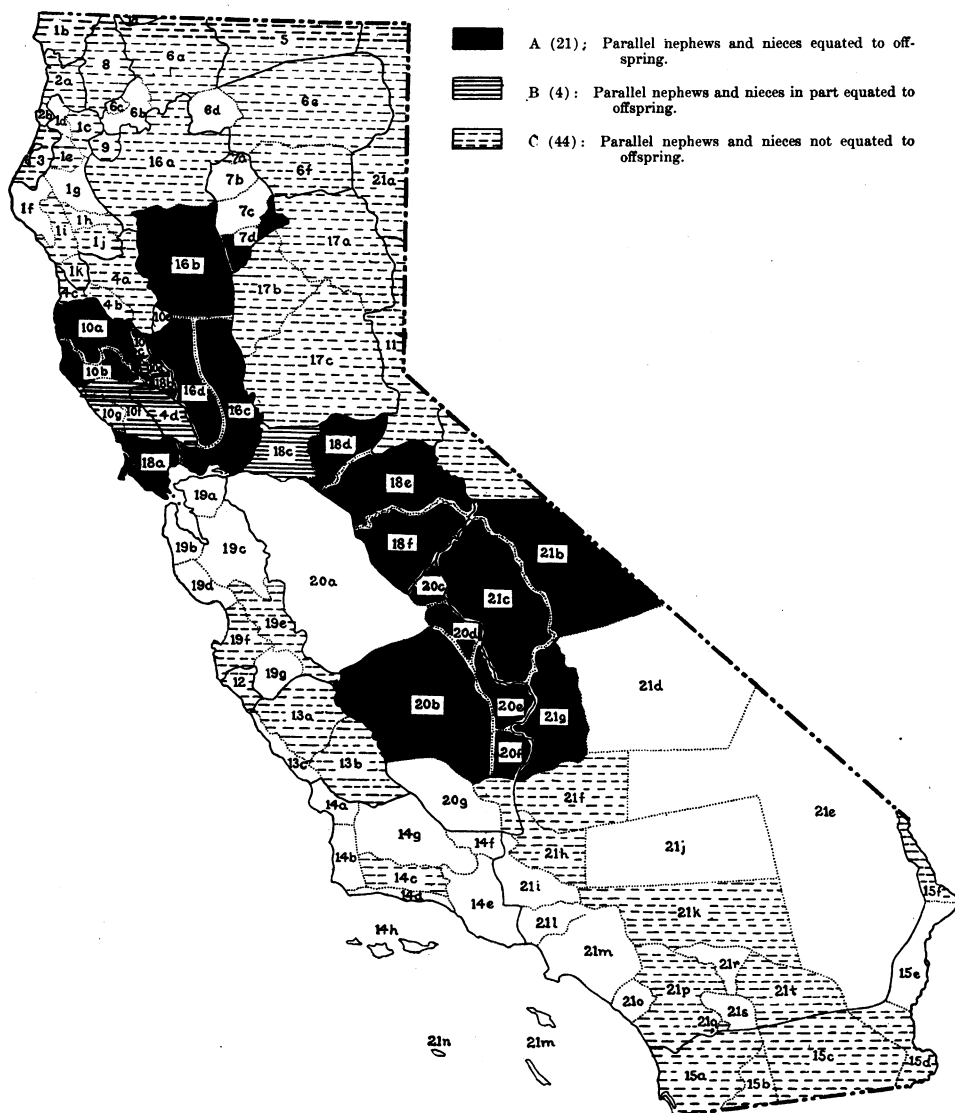
Four others (type B) do so in part: Plains Miwok (18c) denotes man's brother's child as offspring, but woman's sister's child by a special term; Southwestern Pomo (10g), Southern Pomo (10f), and Wappo (4d) denote only man's older brother's and woman's older sister's children as offspring. Man's younger brother's and woman's younger sister's children are called grandchildren by the two Pomo groups. The Wappo also denote man's younger brother's children as grandchildren, but denote woman's younger sister's children by variants of a special stem. This is in part explained by the fact that father's older brother in these three languages (10g, 10f, 4d) is denoted by the term for father's father.

Forty-four tribes do not employ offspring terms at all. These form our type C. Map 12 shows that the tribes employing offspring terms (types A and B) form two compact areas separated only by the intermediate Plains Miwok (18c), again exemplifying our Sacramento-San Joaquin valley kernel, which as usual has a peripheral and contrasting

<sup>48</sup> The Cocopa of Lower California follow this scheme.

<sup>49</sup> Cocopa, like other Yuman tribes, belongs to type C (see map 12).

shell consisting of the forty-four tribes that follow type C. A comparison of this map with that displaying the tribes which employ the term father for father's brother (map 8) shows that tribes which



Map 12.—The designating of parallel nephews and nieces as offspring.

designate the father's brother as father also denote parallel nephews and nieces as offspring, which one would expect. The same remark applies to the six central Californian tribes which employ the term

mother for mother's sister (map 9). The five Southern California Shoshonean (21) tribes which exhibit this trait in modified form, however, do not employ offspring terms for parallel nephews and nieces.

The Yauelmani (southern part of area 20b) are shown as not denoting parallel nephews and nieces as offspring, but it is of interest to note that the two terms they use denote son and daughter in the related Tachi (northern part of area 20b) dialect.

### *Cross-Nephews and Cross-Nieces*

Cross-nephews and cross-nieces fall into four general types, the distribution of which is plotted on map 13.

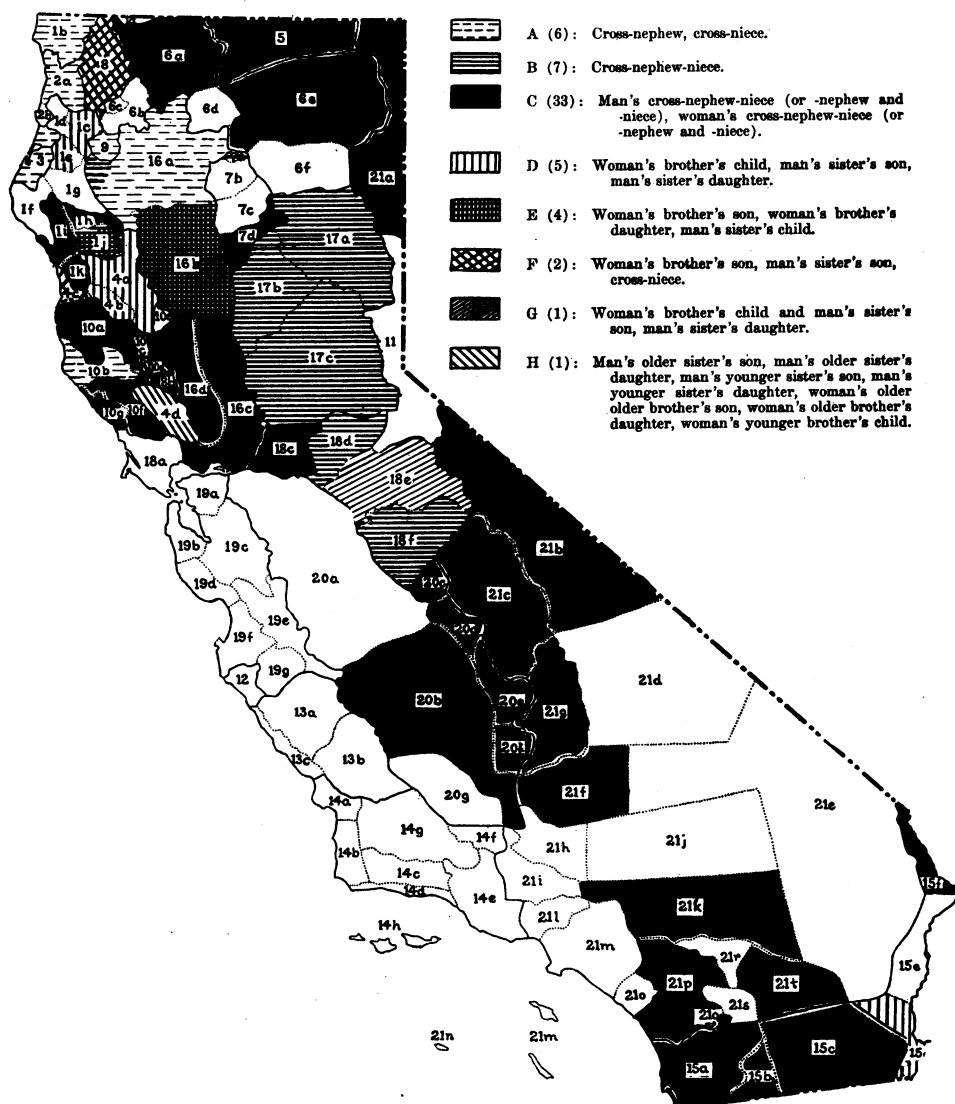
Type A, which distinguishes cross-nephew and cross-niece, takes cognizance of the sex of the relative. All but one of the groups employing this scheme are in the mountainous northern part of the state. The outlying group is the Central Pomo (10b) to the southward in Mendocino county.

Type B disregards sex of relative and also line of descent (that is, whether paternal or maternal) and denotes cross-nephew-niece by a single term. Bating its occurrence among the Northern Yana (7a), this method is utilized only by Penutian groups.

Type C recognizes the sex of the speaker and in part that of the relative denoted. Either two or four terms are employed. If two, then man's cross-nephew-niece and woman's cross-nephew-niece are distinguished; if four, man's cross-nephew, man's cross-niece, woman's cross-nephew, woman's cross-niece. This type is distributed the entire length of the state and is by far the most popular, being employed by 57 per cent of all of the tribes (including the Cocopa) from which we have data.

Types D to H all possess one common character, namely, asymmetry. Type D, employed by the Yuma (15d), Huchnom (4b), Yuki (4a), Hupa (1c), and Whilkut (1e), designates woman's brother's child, man's sister's son, and man's sister's daughter. Type E, utilized by the Central Wintun (16b), the Southeastern Pomo (10d), the Eastern Pomo (10e), and the Wailaki (1j), denotes woman's brother's son, woman's brother's daughter, and man's sister's child. Type F discriminates between woman's brother's son and man's sister's son, but unites their daughters in one term translatable as cross-niece. This type is limited to the Karok (8) and Coast Yuki (4c). Type G, employed by the Central Miwok (18e), merges man's sister's son in woman's brother's child, but distinguishes man's sister's daughter.

Type H, peculiar to the Wappo (4d), uses seven terms which denote man's older sister's son, man's older sister's daughter, man's younger sister's son, man's younger sister's daughter, woman's older brother's

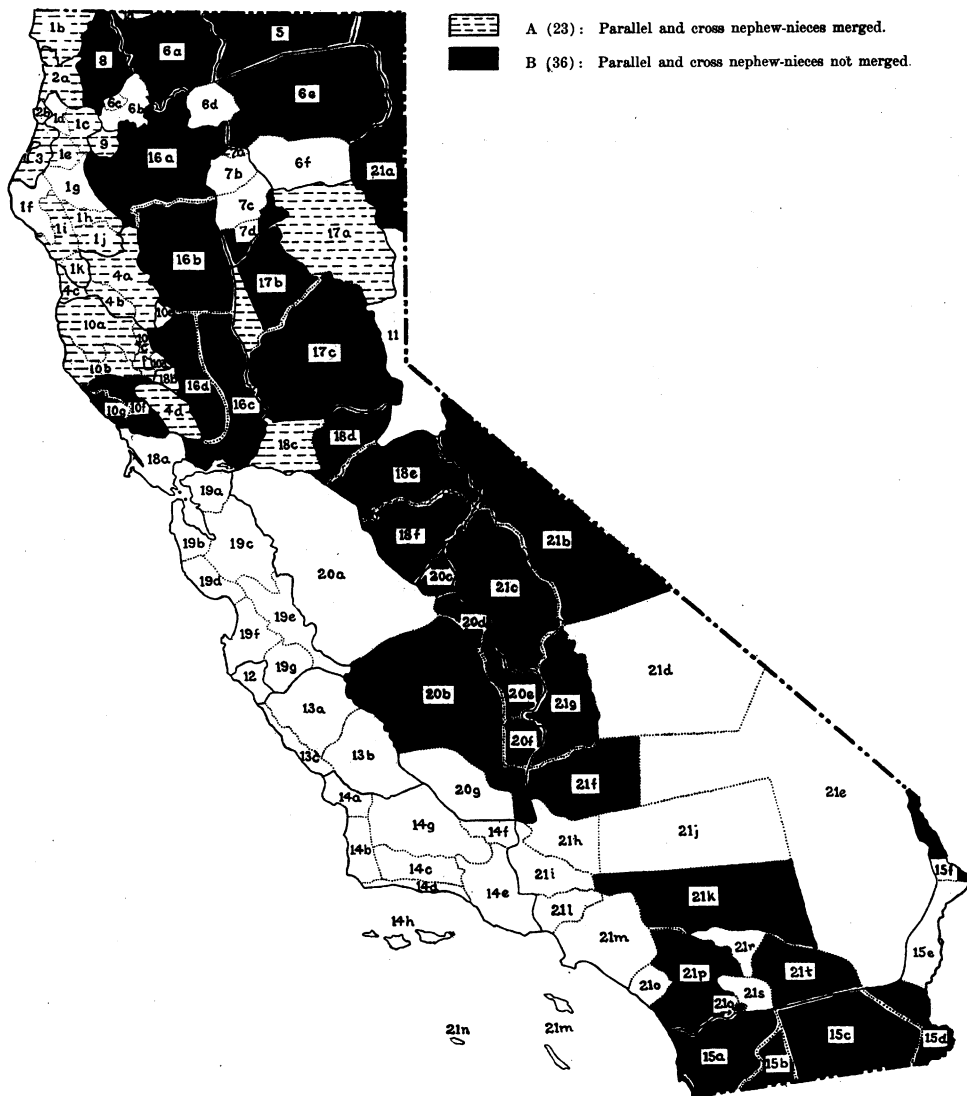


Map 13.—Cross-nephews and cross-nieces.

son, woman's older brother's daughter, woman's younger brother's child. This multiplicity of terms is undoubtedly a correlate of the unique eight uncle-aunt terms of the Wappo (4d).

### *Merging of Parallel and Cross Nephews and Nieces*

Thus far, for the sake of clearness, we have proceeded as though parallel and cross nephews and nieces were never merged, but were



Map 14.—The merging of parallel and cross nephew-nieces

always carefully distinguished in the native terminology. This is far from the truth, for twenty-three tribes merge in some degree parallel and cross nephews and nieces. However, these twenty-three tribes are



less than 40 per cent of those from which we have full data. So it may be conversely stated that over 60 per cent of the Californian groups (including the Cocopa) discriminate between cross-nephew-nieces and parallel nephew-nieces. It remains to indicate those which do not discriminate and the manner of the non-discrimination. Map 14 will prove an aid to the comprehension of the situation.

The chief method of merging the parallel and cross nephew-nieces is to ignore the sex of the speaker, thus designating man's brother's child and woman's brother's child simply as brother's child. To this is added at times the negative trait of ignoring the sex of the connecting relative; thus, woman's sibling's son, or woman's nephew, instead of woman's brother's son and woman's sister's son. When both of these categories, sex of speaker and sex of connecting relative, are absent, a terminology results which resembles English. This is the case with four Californian peoples, the Wiyot (3), Yurok (2a), Chimariko (9), and Central Pomo (10b). One tribe, the Northeastern Maidu (17a), goes a step further and ignores the sex of relative so that but a single term meaning nephew-niece results.

The remaining eighteen tribes do not carry the merging of the parallel and cross nephews and nieces so far. The following list shows just what is done by each tribe. The letters in parentheses (a, b, c) indicate the terms used.

Plains Miwok (18c): (a) Brother's child.

Northwestern Maidu of Plains (part of 17b): (a) Brother's child, man's sister's child.

Lake Miwok (18b): (a) Brother's child, woman's sister's child.

Northern, Eastern, and Southeastern Pomo (10acd): (a) Brother's son, woman's sister's son; (b) brother's daughter, woman's sister's daughter.

Yuki (4a): (a) Brother's child; (b) sister's daughter, woman's sister's son.

Hupa (1c), Whilkut (1e): (a) Brother's child; (b) sister's son; (c) sister's daughter.

Wailaki (1j): (a) Sister's child.

Northern Yana (7a): (a) Sister's child, woman's brother's child.

Lassik (1h), Sinkyone (1i), Kato (1k): (a) Sister's son; (b) sister's daughter.

Tolowa (1b): (a) Sister's son, woman's brother's son; (b) sister's daughter, woman's brother's daughter.

Huchnom (4b): (a) Sister's daughter, woman's sister's son.

Coast Yuki (4c): (a) Sister's daughter, woman's brother's daughter; (b) woman's sibling's son.

Wappo (4d): (a) Younger sister's son; (b) younger sister's daughter.

The geographic distribution of the trait of merging is of interest. All the tribes with this trait lie north of the latitude of San Francisco.

Four occupy isolated positions in the eastern part of the state. These are the Northern Yana (7a), the Northeastern Maidu (17a), the Northwestern Maidu of the Plains (part of 17b), and the Plains Miwok (18c). The remaining nineteen tribes occupy an almost solid strip of coast from the Oregon border to south of Point Arena on the coast, south to Napa inland. The trait of merging is shared by all the seven Athabaskan tribes from which data are forthcoming, by the two Algonkin (2 and 3) tribes, by the four Yukian (4) tribes, by four out of six Pomo (10) tribes, and a few other scattering Hokan and Penutian groups. Merging is indulged in by neither the Lutuamian (5) nor the Shoshonean (21) groups.

#### COUSINS

##### Map 15

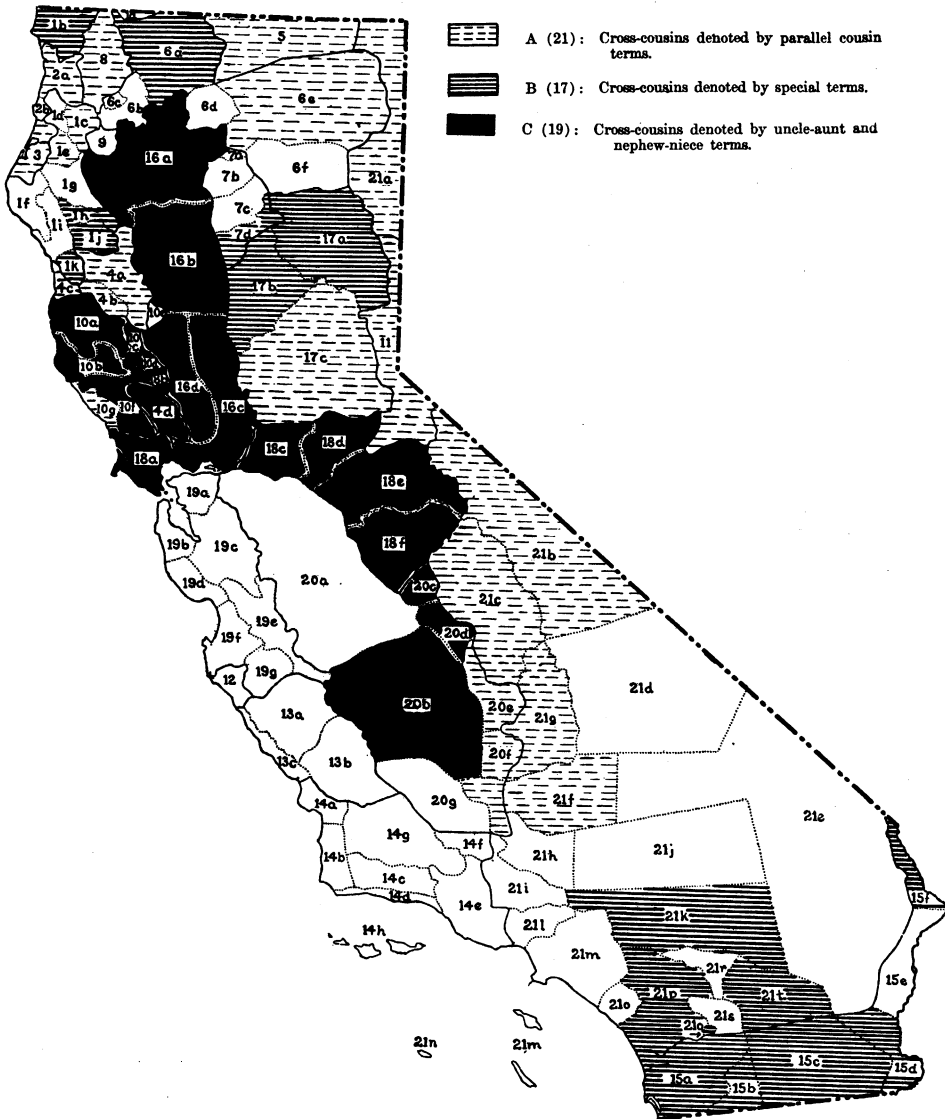
For greater facility of consideration it seems well to consider first the parallel cousins alone, then the cross-cousins.

Data concerning parallel cousins are at hand from sixty tribes. In all but three tribes they are designated by sibling terms. The three exceptions are the Wiyot, Yuma, and Mohave. The Wiyot employ a special term meaning first cousin. The Yuma employ three special terms and the Mohave four. Among the Yuma and Wiyot second cousins employ sibling terms, which shows that their schemes are only superficial departures from the common pattern and that the first cousins are tacitly regarded as siblings.

Of the fifty-seven tribes denoting parallel cousins as siblings, forty-four employ the terms on the basis of the relative ages of the cousins concerned, while thirteen (including the Cocopa) employ them according to the relative ages of the connecting parents. This second method is the only one employed in southern California with the exception of the peculiar Yuma and Mohave terminology already mentioned. This second method also occurs sporadically in the northern half of California: Southwestern and Southern Pomo (10gf), Wappo (4d), Northern Wintun of Shasta county (part of 16a), and Coast Yuki (4c). The Northern Wintun and Coast Yuki represent isolated developments, but undoubtedly the Southern Pomo, Southwestern Pomo, and Wappo phenomena are of one origin, as the groups are contiguous.

Fifty-eight tribes are represented in the data on cross-cousins. These data reveal three types of classification of nearly equal popularity, being employed respectively by twenty-one, eighteen (including Cocopa), and nineteen tribes.

Type A employs the parallel cousin terms, which is equivalent to saying that they employ sibling terms, with the one exception of the Wiyot (3). This type, as map 15 will show, is peripheral, being found



Map 15.—Cross-cousins.

along the eastern border of the state as far south as the Tehachapi mountains and on three parts of the coast north of San Francisco. Members of all the seven linguistic families of California employ it, which gives it the aspect of a basic system.

Type B employs special terms for cross-cousins with the exception that Mohave (15f), Lassik (1h), Wailaki (1j), and Kato (1k) make some use of sibling terms. This type is the only one found in southern California. In northern California it is employed by several Athabaskan, Hokan, and Penutian peoples.

With type C we reach our typical central Californian method with the usual longitudinal interior valley distribution, reaching westward to the ocean north of the Golden Gate. Type C is the only type with an uninterrupted distribution. It is found with the Wappo (4d) and among Penutian (Wintun, 16; Miwok, 18; Yokuts, 19) and Pomo (10) groups. The only Pomo group from which we have data showing that it does not adhere to this type is the Southwestern (10g). The type appears as essentially Penutian. Its chief characteristic is the employment of the terms for mother's siblings for mother's brother's children, and of the terms for sister's children for father's sister's children, thus evincing a logical connection with the treatment of father's sister as sister, already discussed in the uncle-aunt chapter. A comparison of map 15 with that for father's sister (map 10) will make clear the presence of a geographic, as well as a logical, correlation.

Although the Northern Wintun (16a) adhere to type C in general, the details of their nomenclature have undergone some modification. Southern Pomo (10f) and Wappo (4d) have completely reversed the patrilinear procedure described above and have adopted a matrilinear one. They identify father's sister's children with father's siblings and mother's brother's children with brother's children. Clearly this is a reversal of the normal procedure of identifying father's sister's children with sister's children and mother's brother's children with mother's siblings. One feature of Southern Pomo and Wappo nomenclature, the identification of father's sister with older sister, would seem to indicate that this reversal is recent. This trait, as remarked above, is clearly associated with the patrilinear type of cross-cousin designation and its presence along with the matrilinear type seems to point to the latter as intrusive.

## STEP-RELATIONS

With some few exceptions, the following statements may be accepted as applying to all California. The step-father is identified with father's brother and, where there are two father's brothers recognized, usually with the younger. The only exception is the case of the Tübatulabal (21g), who identify the step-father with the father's older brother. Step-mother is usually identified with mother's sister and, where there are two, with mother's younger sister. The Yuki (4a) identify her with mother's older sister, while the Southern Miwok (18f) and Northern Pomo (10a) apply the term for either mother's older or younger sister according as the step-mother is older or younger than the mother. Step-children, in almost every case, are known by the corresponding reciprocals. Tübatulabal (21g), however, although employing the term for mother's younger sister, denotes the step-child by a special term. The same is true of man's step-child in that language. Tachi (part of 20b) denotes step-children by variants of offspring terms.

Next, I wish to consider the several departures from the rule for designating step-father and step-mother and reciprocally step-child. Although the Wiyot (3) recognize step-siblings, they do not recognize step-parents or step-children in their terminology. Tolowa (1b) employs a special term for step-father which takes as its reciprocal the terms for man's sister's children. Chimariko (9) employs a unique term for step-father, as also does Karok (8). The latter has another special term for the reciprocal relation. Yahi (7d) employs a special self-reciprocal term for step-father.

Several groups which have special terms for mother's sister's husband and father's brother's wife identify the step-parents with these. Tribes which identify step-father with mother's sister's husband are the Achomawi (6e), Lutuami (5), southern Eastern Mono (part of 21b), Southern and Northern Miwok (18fd). Achomawi has a special term, meaning step-child or spouse's nephew-niece, as reciprocal; Lutuami is self-reciprocal; Southern and Northern Miwok employ the terms for offspring as reciprocals. The tribes which identify father's brother's wife with step-mother are the Achomawi (6e), Yahi (7d), Lutuami (5), and southern Eastern Mono (part of 21b). As reciprocal, Achomawi employs the term for step-child mentioned above; Yahi employs the term for husband's brother's child; the Lutuamian term is self-reciprocal. From the southern Eastern Mono, the terms for step-children were not secured.

Among the Yuman (15) tribes of southern California, except the Northern Diegueño (15a) who follow the general Californian scheme, step-father is denoted by a non-uncle term. The Yuma (15d), Mohave (15f), and Cocopa each employ a term which otherwise denotes grand-parent's brother. The reciprocal denotes sibling's grandchild. Step-mother and woman's step-child in these three tribes are denoted by terms of wide application to relatives by marriage. In Kamia (15c) and Southern Diegueño (15b) step-father and man's step-child are denoted by unique terms. Southern Diegueño unites step-mother with mother's younger sister, as elsewhere in California.

Step-siblings are everywhere denoted as siblings except among the Hupa, Whilkut, and Tolowa (1ceb), who employ no terms. The Karok (8) add a suffix to the sibling terms.

#### SPOUSES OF AUNTS AND UNCLES

##### Maps 16 and 17

The combination of slightly varying methods of designating the relatives of this class are so numerous that it becomes necessary to break the class into four sections. I shall therefore take up in turn the mother's sister's husband, father's brother's wife, father's sister's husband, and mother's brother's wife. Wherever necessary I shall present the distribution of the types of classification of these various relatives with the aid of maps.

Before taking up each of the four relations mentioned above, it will be possible to clear the way slightly by citing two or three peculiar types of classification that apply to the class as a whole and yet are of exceedingly limited distribution. To begin with, Wiyot (3) and Yurok (2a), both Algonkin, do not regard the spouses of aunts and uncles as relatives and therefore have no designations for them. The Lutuami (5) go to the opposite extreme and employ four self-reciprocal terms. The Achomawi (6e) employ a single term which means spouse of an aunt or uncle, also step-parent. The reciprocal is another term meaning spouse's sibling's child or step-child. These types dispose completely of Wiyot, Yurok, Lutuami, and Achomawi so far as spouses of aunts and uncles and their reciprocals are concerned.

*Mother's Sister's Husband*

We shall now confine our discussion to the methods of designating mother's sister's husband in the remaining fifty tribes from which our data are derived. Forty of these tribes<sup>50</sup> equate the mother's sister's husband to the father's brother. This is true even in the cases where father's older brother and father's younger brother, mother's older sister and mother's younger sister, are differentiated. The scheme, then, is to equate mother's older sister's husband to father's older brother, and mother's younger sister's husband to father's younger brother. In a single case (Tübatulabal, 21g), and perhaps in a second (Lake Miwok, 18b), the equation is slightly different: mother's sister's husband older than father equals father's older brother, mother's sister's husband younger than father equals father's younger brother. The age of the relative and not of the connecting relative is considered in these two cases.

Southern Pomo (10f) presents an exception and really should not be included in the forty groups which equate spouses of aunts and uncles to uncles and aunts. Although mother's younger sister's husband is denoted as father's younger brother, mother's older sister's husband is denoted as mother's father instead of father's older brother, as in analogous cases.

Of the ten groups which do not equate mother's sister's husband to father's brother, six designate him as a brother-in-law. Four of these groups lie in northwestern California. They are the Hupa (1c), the Whilkut (1e), the Tolowa (1b), and the Karok (8), who denote all spouses of uncles and aunts as siblings-in-law. The remaining two are the Yuma and Kamia of southern California, who use terms with a wide range in several classes of relatives by affinity.

The Northern Miwok (18d), Central Miwok (18e), and Southern Miwok (18f), exclusive of the Pohonichi or southernmost, designate the mother's sister's husband by the special term *haiyi*, also applied to step-father. The reciprocals of this term are the words for offspring. This term is also applied by the Mono (21bc) to the father's brother

<sup>50</sup> Lassik (1h), Wailaki (1j), Sinkyone (1i), Kato (1k), Shasta (6a), Northwestern Maidu (17b), Northeastern Maidu (17a), Southern Maidu (17c), Eastern Mono (21b), Western Mono (21c), Paleuyami (20f), Yauelmani (part of 20b), Yaudanchi (20e), Tachi (part of 20b), Gashowu (20d), Chukchansi (20c), Pohonichi (part of 18f), Plains Miwok (18c), Southeastern Wintun (16c), Southwestern Wintun (16d), Central Wintun (16b), Northern Wintun (16a), Southwestern Pomo (10d), Eastern Pomo (10e), Northern Pomo (10a), Huchnom (4b), Yuki (4a), Coast Yuki (4c), Kawaiisu (21f), Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), Southern Diegueño (15b), Northern Diegueño (15a), Lake Miwok (18b), Central Pomo (10b), Southwestern Pomo (10g), Wappo (4d), Tübatulabal (21g), Southern Pomo (10f).

and in modern usage denotes the same relative among the Central Miwok. I suspect that the term is of Shoshonean origin and has been adopted by the Miwok, especially since it is also employed by the Northern Paiute (21a).

Finally, we reach the last method of designating mother's sister's husband. It is not a strictly Californian method, since it is found only among the Cocopa of Lower California. The scheme is to denote this relative by the term which means grandparent's brother and step-father. The reciprocals correspond conceptually.

In closing it should be noted that, in Coast Yuki (4c), where there is but a single term for aunt, the aunt's husband is equated to father's brother and not to mother's brother.

### *Father's Brother's Wife*

Father's brother's wife is equated to mother's sister by forty-one out of fifty-six Californian tribes. In those tribes in which two terms are employed for mother's sister both are utilized in denoting father's brother's wife, with two exceptions.<sup>51</sup> The two terms, however, are utilized in different ways by different tribes. Those which possess two terms for father's brothers' wives do not hesitate to equate father's older brother's wife to mother's older sister and father's younger brother's wife to mother's younger sister.<sup>52</sup> Those which possess only a single term for father's brother, but two for mother's sister, make the relative age of the mother and the father's brother's wife the criterion; thus, father's brother's wife older than mother equals mother's older sister, father's brother's wife younger than mother equals mother's younger sister.<sup>53</sup> One tribe, the Central Pomo (10b), which follows this plan, distinguishes father's older from father's younger brother.

Twenty tribes,<sup>54</sup> which do not differentiate uncles and aunts as to age, simply equate father's brother's wife to mother's sister. I have

<sup>51</sup> Plains Miwok (18c) employs only the term for mother's older sister, Eastern Pomo (10c) only the term for mother's younger sister. It is not unlikely that the data are faulty.

<sup>52</sup> Tribes following this plan are the Kawaiisu (21f), Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), Luiseño (21p), Southern Diegueño (15b), Northern Diegueño (15a), Lake Miwok (18b), Coast Miwok (18a), Huchnom (4b), and Yuki (4a).

<sup>53</sup> Tribes adhering to this scheme are the Tübatulabal (21g), Chukeyansi (20c), Southern Miwok (18f), Central Miwok (18e), Northern Miwok (18d), Southeastern Pomo (10d), Central Pomo (10b), and Northern Pomo (10a).

<sup>54</sup> Lassik (1h), Wailaki (1j), Sinkyone (1i), Kato (1k), Shasta (6a), Northwestern Maidu (17b), Northeastern Maidu (17a), Southern Maidu (17c), Eastern Mono (21b), Western Mono (21c), Paleuyami (20f), Yauelmani (part of 20b), Yaudanchi (20e), Tachi (part of 20b), Gashowu (20d), Southeastern Wintun (16c), Southwestern Wintun (16d), Central Wintun (16b), Northern Wintun (16a), and Coast Yuki (4c).



included in this category the Coast Yuki (4c), who have but a single term for aunt (either father's or mother's sister), employed for both father's brother's wife and mother's brother's wife.

Southwestern Pomo (10g), Southern Pomo (10f), and Wappo (4d) denote father's younger brother's wife by the term for mother's younger sister, but father's older brother's wife they denote by the term for father's mother. This curious use of a grandparent term, it seems likely, may have arisen in one of these three contiguous groups and spread to the other two.

The designation of father's brother's wife as sister-in-law is to be found in northwestern and southeastern California. In the north it is followed by the Hupa, Whilkut, Tolowa, and Karok, who designate all spouses of uncles and aunts by sibling-in-law terms. In the south the Yuma, Kamia, and Cocopa follow this terminology, although the terms they use are employed among several classes of relatives by marriage, and not alone in the sibling-in-law class.

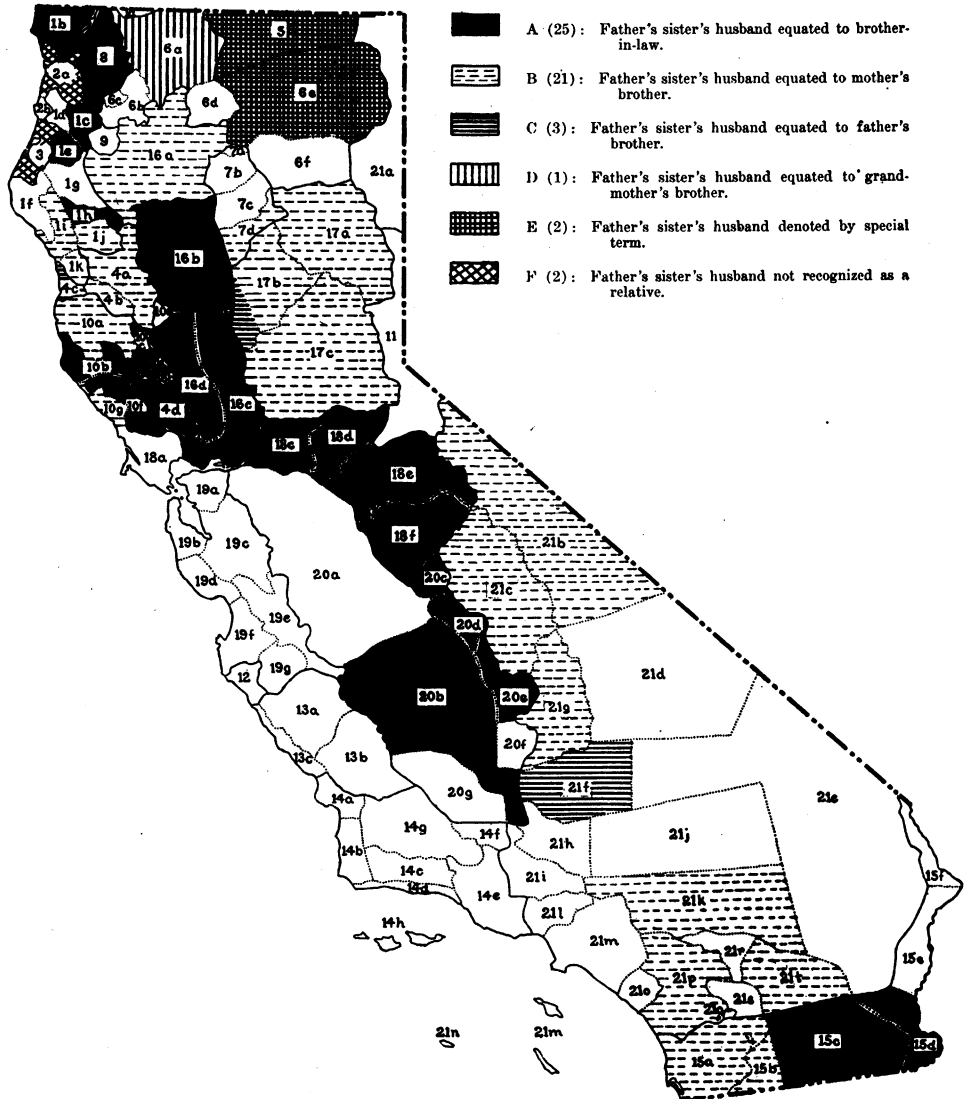
The Yahi (7d) employ their peculiar step-mother term in designating father's brother's wife. Their equally unique reciprocal denotes husband's brother's wife and woman's step-child.

#### *Father's Sister's Husband*

There are six methods of designating father's sister's husband in California, as revealed by data from fifty-five tribes. Two of these methods enjoy about equal popularity. Map 16 presents the six types of designation.

Types A and B, which respectively equate father's sister's husband to brother-in-law and to mother's brother, have a statewide distribution, A being primarily central Californian with northwestern and southeastern extensions, B being peripheral to A, the two standing in figurative relation of kernel (A) and shell (B). It would be imagined that the conditioning factor for the presence of the brother-in-law designation is the trait of calling father's sister by the term for older sister. But this is by no means a prerequisite, as is shown by the fact that nineteen of the twenty-five groups which designate father's sister's husband as brother-in-law do not denote father's sister by the term for sister. Conversely there are certain groups (Sinkyone, 1i; Wailaki, 1j; Kato, 1k) which designate father's sister as sister, but equate father's sister's husband to mother's brother instead of to brother-in-law. Then, too, it must be remembered that, in a number of groups

(Hupa, 1c; Whilkut, 1e; Tolowa, 1b; Karok, 8; Yuma, 15d; Kamia, 15c) the denoting of father's sister's husband as brother-in-law is but an integral part of a much more comprehensive phenomenon, the



Map 16.—The denoting of father's sister's husband.

equating of all spouses of uncles and aunts to siblings-in-law, or, in the case of the Yuma and Kamia, to various other relatives by marriage as well as to the siblings-in-law. It seems probable that the central Californian method of equating father's sister's husband to

brother-in-law may be of indigenous origin and genetically connected with the custom of denoting father's sister as sister, which is the vogue in north central California. The more comprehensive northwestern and southeastern schemes may be of independent origin and unconnected genetically with the central Californian scheme. As the matter stands, the northwestern and southeastern schemes seem to be local developments, the first evidently an Athabascan (1) specialization which has spread to the Karok (8), the second assuredly a Yuman (15) invention (viewed from the standpoint of Californian data only). It should be noted that no Shoshonean (21) or Algonkin group, nor the Lutuami (5), follows the plan of designating father's sister's husband as brother-in-law.

A comparison of map 16 with those for father's sister (map 10) and cross-cousins (map 15) will show that the areas in which father's sister's husband equals brother-in-law, father's sister equals sister, and cross-cousins equal uncle-aunts and nephew-nieces, in large measure coincide, apparently demonstrating that the above methods of designating these three relatives are closely connected and probably have a common basis—social or psychic, or more correctly both. These three traits are all thoroughly established in the kernel of California—the Sacramento-San Joaquin valley region, where they have their stronghold among the Penutian tribes.

The second, and to us more logical, method (B) of designating father's sister's husband by equating him to mother's brother, since it is essentially our own, seems to me to be the least specialized, since it is the plan widely followed for other spouses of uncles and aunts. In California all Shoshonean groups follow it, except the Kawaiisu (21f), who denote father's sister's husband as father's older brother. Some Athabascan (1), Hokan, Penutian, and Yukian (4) groups also follow type B, as will be seen on consulting map 16. The two Yukian groups, Huchnom (4b) and Yuki (4a), exhibit an amplification of type B. Both discriminate between father's older and younger sisters and mother's older and younger brothers. Hence they equate father's older sister's husband to mother's older brother and father's younger sister's husband to mother's younger brother.

Type C, in which father's sister's husband equals father's brother, is followed by the Kawaiisu (21f), whom we have noted as designating father's sister's husband as father's older brother, the Northwestern Maidu of the Plains (part of 17b), and the Coast Yuki (4c). The two latter groups simply equate father's sister's husband to father's

brother. At the same time both equate mother's sister's husband to father's brother. Thus we might summarize by saying that these two tribes denote either aunt's husband by the term for father's brother, thus ignoring the principle of bifurcation.

Type D, equating father's sister's husband to grandmother's brother, is followed by the Shasta (6a) and the Cocopa of Lower California (not shown on our map). The Cocopa equate father's sister's husband to grandparent's brother. The Shasta equate him to grandmother's brother, great grandfather, and step-parent's father.

Type E, employing a special term, is represented by the Lutuami (5) and Achomawi (6e), both employing special terms.

Type F, which does not actually exist, as it does not recognize father's sister's husband as a relative at all, is perhaps the most remarkable of all psychologically, because of the peculiar viewpoint which it exemplifies. It is limited to the Algonkin Yurok (2a) and Wiyot (3). I should add, as stated earlier in the chapter, that none of the spouses of uncles and aunts are regarded as relatives. In this connection it is of interest to note that the Wiyot do not recognize step-parents and step-children as relatives, and that the Hupa (1c), Whilkut (1e), and Tolowa (1b), all neighbors of the two Algonkin groups, do not recognize step-siblings as relatives. This trait of non-recognition seems to be peculiar to northwestern California, and is perhaps connected in some manner with the peculiar social system in which wealth plays an important part.

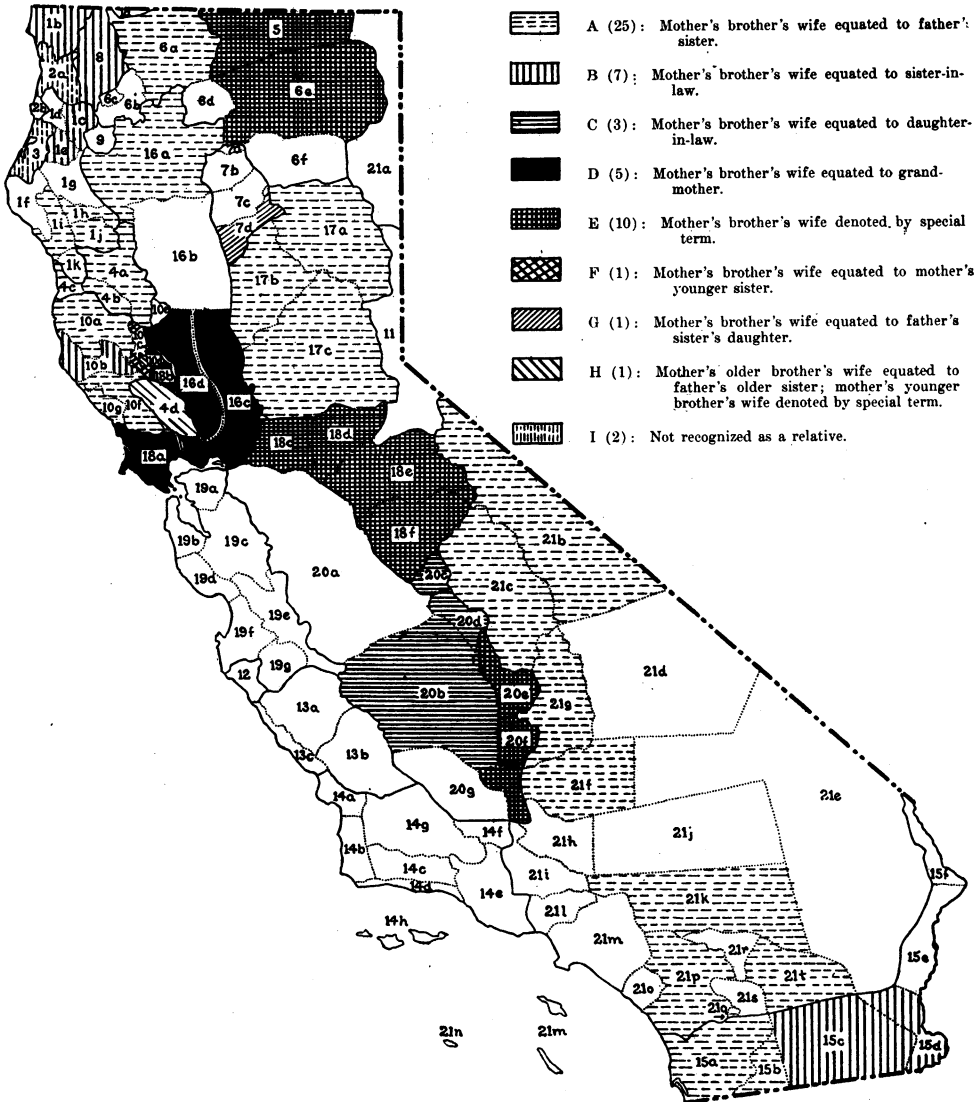
#### *Mother's Brother's Wife*

The classification of mother's brother's wife affords some problems as interesting as those connected with father's sister's husband. The data at hand are derived from fifty-six tribes, and illustrate nine types of classification, as presented in map 17.

Type A, with mother's brother's wife equated to father's sister, is found for the entire length of the state. It is undoubtedly the most generalized type of nomenclature, as it is utilized by Hokan, Yukian (4), Penutian, Athabascan (1), and Shoshonean (21) groups. The Lutuamian (5) and Algonkin groups do not follow it. Comparison with map 16 will show that, with few exceptions, the groups which equate father's sister's husband to mother's brother are the ones which equate mother's brother's wife to father's sister.

Type B, which equates mother's brother's wife to sister-in-law, is composed, except for the anomalous Central Pomo (10b), entirely of

groups which denote all spouses of uncles and aunts by sibling-in-law terms. With the exception mentioned, it is strictly limited to the northwestern and southeastern regions.<sup>55</sup> It is notable that, of all the



Map 17.—The denoting of mother's brother's wife.

central Californian tribes which denote father's sister's husband as a brother-in-law (see map 16), the Central Pomo (10b) is the only one which also denotes mother's brother's wife as a sister-in-law, again

<sup>55</sup> The extralimital Cocopa also follow type B.

emphasizing the probable indigenous origin of the central Californian method of denoting father's sister's husband as brother-in-law, and its genetic independence of the similar northwestern and southeastern practice.

Type C, which equates mother's brother's wife to daughter-in-law, is the vogue in a block of three Yokuts tribes, the Tachi (part of 20b), the Gashowu (20d), and the Chukchansi (20c). In denoting mother's brother's wife as daughter-in-law it tacitly relegates mother's brother to the position of son. The mother's brother's wife reciprocates with the terms for parents-in-law in addressing the junior generation.

Type D places mother's brother's wife in the grandmother class. The Lake and Coast Miwok (18ba) and the Southeastern and Southwestern Wintun (16cd) designate her as grandmother; the Southeastern Pomo (10d) denote her as mother's mother. These five tribes form an unbroken area, which seems to indicate that the trait has but one place of origin. It seems probable that the trait is fundamentally a Southern Wintun one, as these people equate mother's brother to grandfather. What is more natural, then, than to call his wife grandmother?

I have already remarked that type E is really composed of a number of types grouped for convenience. All have one trait in common—the use of a special term for mother's brother's wife. Two cases, Achomawi (6e) and Lutuami (5), we have already discussed at the beginning of the chapter. The remaining instances of special terms are all Miwok (18) and Yokuts (20). The interest really centers in the reciprocals of these terms, for they frequently betray the true nature of the terms. The first to notice is that of the Plains Miwok (18c), who employ a term for mother's brother's wife which is composed of the term for father's sister, ene, plus the suffix -tei. The reciprocal of this term enetei is the term usually employed for woman's sister's child.

The Central Miwok (18e) and the Pohonichi or southernmost Southern Miwok (part of 18f) employ the special term kumatsa for mother's brother's wife. The reciprocals are also special terms, for the Central Miwok, pinuksa, for the Pohonichi, kimeteumu. The latter is plainly of the same origin as the self-reciprocal Chukchansi (20c) gimete, mother-in-law's brother and man's sister's child-in-law. It is of interest to note that the taboo of non-intercourse is in force between the mother's brother's wife and the husband's sister's son exactly as though they were mother-in-law and son-in-law. This is

readily intelligible when we find that, among the northerly Southern Miwok (part of 18f) and the Northern Miwok (18d), the mother's brother's wife designates the husband's sister's children as children-in-law and, furthermore, that cross-cousin marriage is practiced among the Miwok.<sup>56</sup> The Northern Miwok employ the term *eneci* for mother's brother's wife, as do the Plains Miwok, but, as we have just seen, with quite different reciprocals.

The three Yokuts groups which designate mother's brother's wife by a special term are the Yaudanchi (20e), the Paleuyami (20f), and the Yauelmani (part of 20b). All agree in using the term for woman's brother's child as the reciprocal, in this respect conforming to type A.

It is of interest to note that, excluding the Lutuami (5) and the Achomawi (6e), who were included only for convenience, types C, D, and E are wholly Penutian save that type D embraces one Hokan group, the Southeastern Pomo (10d). Departure from the general type of designation (A) for mother's brother's wife and father's sister's husband seems therefore to be a marked Penutian trait.

We come now to four discrete examples of mother's brother's wife terminology. First (type F), the Eastern Pomo (10c) unite the relative in question with mother's younger sister. Second (type G), the Yahi (7d) denote her by the term for father's sister's daughter, a cross-cousin. She reciprocates with another cross-cousin term. Third (type H), the Wappo (4d) equate mother's older brother's wife to father's older sister; mother's younger brother's wife they denote by a special term. The reciprocals of both are sibling-in-law terms. Fourth (type I), the Yurok and Wiyot decline to recognize mother's brother's wife, or other spouse of uncle or aunt, as a relative.

Except where noted to the contrary, the terms for spouses' siblings' children are the normal reciprocals of the terms which are employed in designating the spouses of uncles and aunts.

#### SPOUSES, CO-WIVES, AND CO-HUSBANDS

The subject of spouses is not a fruitful one for discussion, for everywhere in California the wife is differentiated terminologically from the husband. The study of interest in connection with spouses would be an examination into the etymology of the terms employed. It is, however, outside the scope of the present paper.

Terms for co-wives were obtained fairly systematically, but I regret that my inquiries for co-husband terms were begun rather late in the

<sup>56</sup> Miwok Moieties, present series, XII, 189, 1916; also this paper, 255.

day, owing to the belief that terms connected with polyandry were not worth inquiring for. It is clear, however, that polyandrous marriages occurred often enough to bring about their recognition in the kinship terminology of a number of tribes. I do not wish to be understood, however, as positing polyandry on a systematic scale. At most it was probably extremely rare. I recall no undoubted examples in the genealogies I have gathered, although polygyny is common enough.

Data on co-wives are available from forty-five tribes, some of which employ two designations; for example, a special term for co-wife, and also the terms for sisters.

The tribes which employ a special term for co-wife are the Hupa (1c), Whilkut (1e), Tolowa (1b), Wiyot (3), Karok (8), Northern Paiute (21a), Eastern Mono (21b), Luiseño (21p), Yuma (15d), Southern Diegueño (15b), Southwestern Pomo (10j), and Southern Pomo (10f). Three groups, Lutuami (5), Shasta (6a), and Central Miwok (18e), employ two special terms meaning earlier co-wife and later co-wife respectively.

A special term denotative of both co-wife and co-husband is employed by the Northeastern Maidu (17a), Tachi (part of 20b), Kawaiisu (21f), Tübatulabal (21g), and Western Mono (21c).

The Western Mono (21c) also employ a supernumerary sister term, meaning woman's sister, for the co-wife. Regular sister terms are quite frequently used. Usually the earlier co-wife is called older sister, the later co-wife younger sister. There are three groups, however, which make relative age, rather than priority of marriage, the criterion. These are the Huchnom (4b), Yuki (4a), and Coast Yuki (4c). Other groups employing sister terms on the basis of priority of marriage are the Southern Maidu (17c), Central Pomo (10b), Luiseño (21p), and Serrano (21k). The Yurok (2a), Central Wintun (16b), Southeastern Pomo (10d), Northern Pomo (10a), and Lake Miwok (18b) also employ sister terms, but I am not certain of the manner of application.

The Wailaki (1j) and Kato (1k) denote co-wife with the term for woman's female cross-cousin. The Northern Wintun (16a), except those of Hayfork, Trinity county, employ the term for woman's female parallel cousin. The Northwestern Maidu of the mountains (part of 17b) use the term which denotes great grandmother and great granddaughter.

Thus far it is to be noted that the terms for co-wives are either unique or the terms for blood relatives extended to include co-wives.



The tribes still to be considered employ terms of affinity. Nine employ for co-wife the term which also means husband's brother's wife and wife's sister's husband. These are the Lassik (1h), Achomawi (6e), Shasta (6a), Hayfork (Northern) Wintun (part of 16a), Wappo (4d), Lake Miwok (18b), Northern Miwok (18d), Serrano (21k), and Cupeño (21q). The Southern Miwok (18f), Southeastern Wintun (16c), and Southwestern Wintun (16d) use for co-wife a term which also means co-husband and wife's sister's husband. Lastly, the Chukchansi (20c) use a term for co-wife and co-husband which is also applied self-reciprocally to wife's grandfather and man's granddaughter's husband.

Terms for co-husbands were obtained for fourteen tribes, although doubtless more employ them. Nine of these we have already mentioned. It now remains to take note of the remaining five. The southerly Eastern Mono (part of 21b) employ a special term. The Southern Maidu (17c) equate co-husbands to brothers, using older or younger according to priority of marriage, while the Northwestern Maidu of the mountains (part of 17b) employ the term for great grandfather and great grandson. The Northern Wintun (16a), exclusive of Hayfork, Trinity county, use the term for man's male parallel cousin. The Northern Miwok (18d) equate the co-husband to the co-wife, wife's sister's husband, and husband's brother's wife.

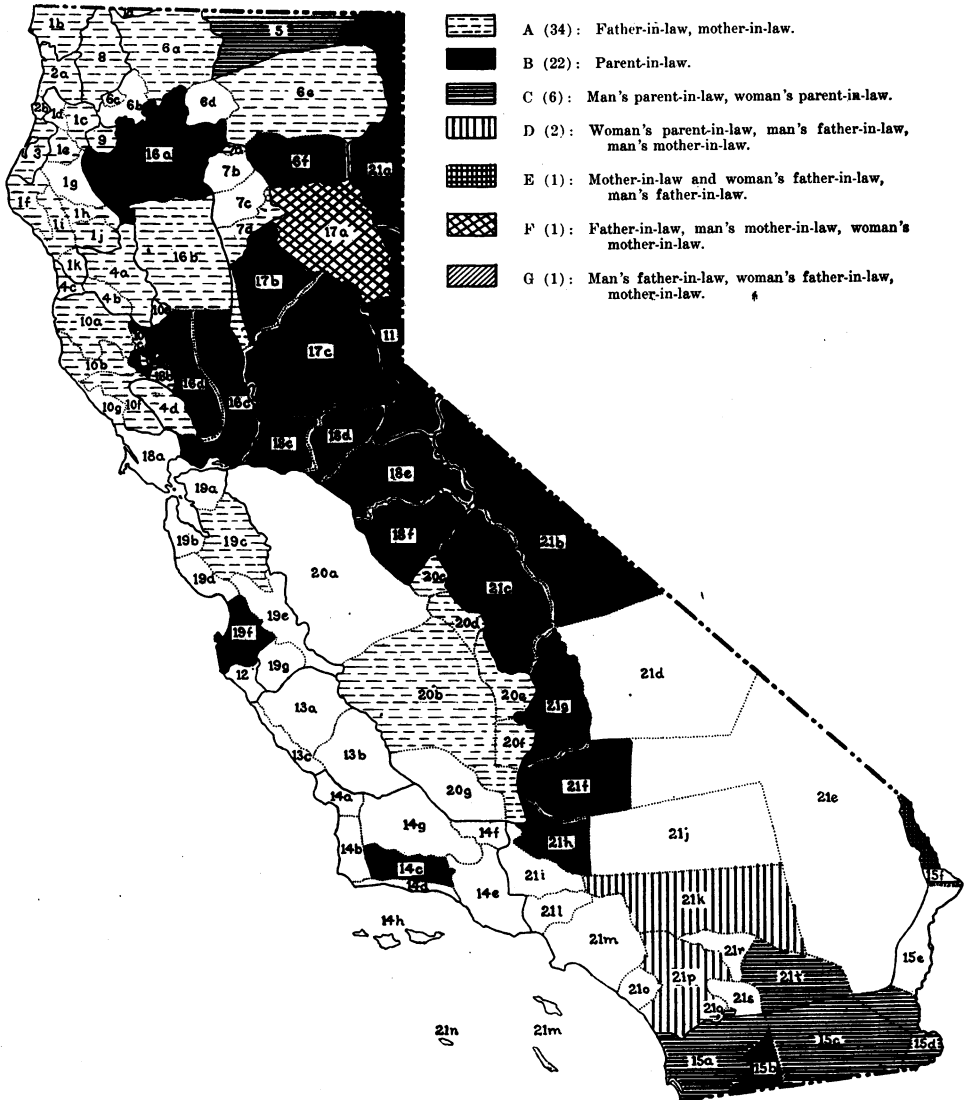
#### PARENTS-IN-LAW AND CHILDREN-IN-LAW

##### Map 18

Data on the classification of parents-in-law are available from sixty-eight Californian groups (including the Cocopa). These data display seven types of classification, two of which are followed by fifty-six tribes. The types of classification and the number of tribes in which each occurs are shown on map 18. One half of the Californians follow type A, which is our own. Nearly a third follow type B with the single term parent-in-law, nearly an eleventh, type C, which distinguishes man's parent-in-law from woman's parent-in-law, and the remainder, types D to G, which combine in various ways the methods of the first three types.

Types A and B are of wide distribution, although the former is found only in central and northern California. All of the Athabascan (1), Algonkin, and Yukian (4) groups follow type A. The Lutuami (5) follow type C. No Shoshonean (21) groups follow type A, but they make use of types B to D. Penutian employs types A, B, and

F; Hoka, types A to E and G. Types C to G are allied, inasmuch as they take cognizance (in varying degree) of the sex of the speaker. Types A and B do not take cognizance of the sex of the speaker.



Map 18.—Parents-in-law.

Types C to G, with three exceptions, are southern Californian. Types A and B, with one exception, are central and northern Californian. The rule, therefore, in central and northern California is non-recognition of the sex of the speaker in parent-in-law terms.

Five-sixths of the Californians denote children-in-law by two terms, son-in-law and daughter-in-law, fifty-five groups in all following this plan. A second scheme, perhaps only a reduction of that just mentioned, employs a single term, child-in-law. This is adhered to by the Ynezeño (14c), the Plains Miwok (18c), the Southeastern, Southwestern, and Northern Wintun (16acd). Three southern Athabascan peoples, Lassik (1h), Wailaki (1j), and Kato (1k), use a third scheme with three terms denotative of son-in-law, man's daughter-in-law, and woman's daughter-in-law, recalling their unusual number of children terms (see map 1). The Serrano (21k) and Luiseño (21p) also employ three terms, but differently. They distinguish daughter-in-law, man's son-in-law, and woman's son-in-law. The Mohave (15f) employ two terms, but asymmetrically. One means man's son-in-law, the other daughter-in-law and woman's son-in-law.

In a number of groups the terms for parents- and children-in-law are self-reciprocal in varying degree. The following list will show the extent to which self-reciprocity is operative.

- Shasta (6a): Son-in-law equals father-in-law; daughter-in-law equals mother-in-law.
- Northeastern Maidu (17a): Son-in-law equals man's mother-in-law; daughter-in-law equals woman's mother-in-law.
- Southern Maidu (17c): Son-in-law equals parent-in-law.
- Serrano (21k): Man's son-in-law equals man's father-in-law; woman's son-in-law equals man's mother-in-law.
- Desert Cahuilla (21t): Son-in-law equals man's parent-in-law; daughter-in-law equals woman's parent-in-law.
- Cupeño (21q): Son-in-law equals man's parent-in-law.
- Luiseño (21p): Man's son-in-law equals man's father-in-law; woman's son-in-law equals man's mother-in-law.
- Mohave (15k): Man's son-in-law equals man's father-in-law; daughter-in-law equals woman's father-in-law equals mother-in-law.
- Plains Miwok (18c): Child-in-law equals parent-in-law.
- Southeastern Wintun (16c): Child-in-law equals parent-in-law.
- Southwestern Wintun (16d): Child-in-law equals parent-in-law.
- Central Wintun (16b): Son-in-law equals father-in-law.
- Northern Wintun (16a): Child-in-law equals parent-in-law.

Complete self-reciprocity occurs in five groups: Desert Cahuilla, Plains Miwok, Southeastern Wintun, Southwestern Wintun, and Northern Wintun. The Desert Cahuilla case is simply another complete manifestation of the Shoshonean tendency toward self-reciprocity. The other three Southern California Shoshonean groups show the same tendency. The four Penutian cases, however, I interpret as not due so much to a reciprocal tendency as to a reduction of the number of

terms employed, which reaches its limit in California among the South-eastern and Southwestern Wintun.

Among relatives by affinity, those of the parent-in-law and sibling-in-law classes are as a rule denoted by special terms. Most others, step-relations, spouses of uncles and aunts and of nephews and nieces, grandparents-in-law, collateral parents- and children-in-law, etc., are denoted by terms derived from other classes of relatives. Hence the merging of parents- and children-in-law in siblings-in-law is of peculiar interest. It occurs among the Colorado river Yuman (15) tribes, among the Yokuts (20), and sporadically with the Rumsen (19f) and Southwestern Pomo (10g).

The Yuman examples are as follows:

Mohave (15f): Mother-in-law, daughter-in-law, woman's father-in-law, woman's son-in-law equal woman's sister-in-law, husband's brother, man's brother's wife.

Yuma (15d) and Cocopa: Woman's parent-in-law equals husband's sibling. Daughter-in-law equals brother's wife.

Kamia (15c): Woman's parent-in-law equals husband's sister, daughter-in-law equals woman's brother's wife.

It is of interest to note that the Southern and Northern Diegueño (15ba) follow the general Californian plan and completely differentiate siblings-in-law from parents- and children-in-law. Five of the six Yokuts (20) tribes from whom I obtained kinship systems identify the son-in-law with the brother-in-law. The sixth group, the Yaudanchi (20e), employ distinct terms for these two relations. The cases of identification are as follows:

Paleuyami (20f), Yauelmani (part of 20b): Son-in-law equals sister's husband.

Gashowu (20d), Chukchansi (20c): Son-in-law equals man's sister's husband.

Tachi (part of 20b): Son-in-law and man's sister's husband denoted by variants of one stem.

Rumsen (19f) identifies daughter-in-law with sister-in-law. Southwestern Pomo (10g) takes relative age into consideration in designating siblings-in-law by parent-in-law terms. This procedure may be exceptional, as it is not substantiated by all informants:

Wife's older sister, husband's older brother equals parents-in-law.

Woman's younger sister's husband equals son-in-law.

Man's younger brother's wife equals daughter-in-law.

## COLLATERAL PARENTS- AND CHILDREN-IN-LAW

For convenience we shall separate these relatives into two groups. One will consist of the parents-in-law's siblings and reciprocally the siblings' children-in-law; the other of the siblings' parents-in-law and reciprocally the children-in-law's siblings.

There are two principal methods of denoting parents-in-law's siblings and siblings' children-in-law. One (A) is to equate them respectively to the parents-in-law and the children-in-law. This plan is followed by twenty-five northern and central Californian tribes,<sup>56a</sup> although actually we have information for only the junior generation from four of these.<sup>57</sup> The other method (B) is to equate the parents-in-law's siblings of like sex and the children-in-law of siblings of like sex to parents-in-law and children-in-law respectively. Those of unlike sex are denoted by terms from other classes or by special terms. This scheme is distinctively a south central and southern Californian one and is followed by nine tribes.<sup>57a</sup>

Four other schemes are followed by the six remaining tribes from whom we have data. Two methods (C and D), related to the two chief types (A and B), are employed by the Kato (1k), the Yuma (15d), and the Cocopa. The Kato unite all of the parents-in-law's siblings with the parents-in-law except father-in-law's sister, whom they call sister-in-law (type C). The Yuma and Cocopa identify woman's parent-in-law's sibling with woman's parent-in-law and reciprocally nephew's wife with daughter-in-law (type D). Three sibling-in-law terms are employed for the relations of man's parent-in-law's siblings and niece's husband. The Kamia (15c) equate all parents-in-law's siblings and siblings' children-in-law to siblings-in-law (type E). The Yurok (2a) and Karok (8) equate them to child's parent-in-law (type F).

It should be noted that the Achomawi (6e), whom I have included among the twenty-five tribes who equate the collateral relatives under discussion to parents-in-law and children-in-law, merge the collateral relatives in a peculiar fashion. They do not equate parent-in-law's

<sup>56a</sup> Tolowa (1b), Hupa (1c), Whilkut (1e), Lassik (1h), Wailaki (1j), Wiyot (3), Shasta (6a), Achomawi (6e), Western Mono (21c), Kawaiisu (21f), Yauelmani (part of 20b), Paleuyami (20f), Yaudanchi (20e), Lake Miwok (18b), Central Wintun (16b), Northern Wintun (16a), Southeastern Pomo (10d), Central Pomo (10b), Northern Pomo (10a), Southwestern Pomo (10g), Southern Pomo (10f), Wappo (4d), Huchnom (4b), Yuki (4a), Coast Yuki (4c).

<sup>57</sup> Wiyot (3), Paleuyami (20f), Yauelmani (part of 20b), Yaudanchi (20e). Wiyot claims to have no term for the senior generation.

<sup>57a</sup> Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), Luiseño (21p), Northern Diegueño (15a), Tachi (part of 20b), Chukchansi (20c), Central Miwok (18e), Northern Miwok (18d).

brother to father-in-law and parent-in-law's sister to mother-in-law, but boldly disregard the sex of the collateral relative and equate father-in-law's sibling to father-in-law and mother-in-law's sibling to mother-in-law, which is the way they handle collateral grandparents (see p. 134).

We shall now consider the methods of designating the second group of collateral parents- and children-in-law, namely, sibling's parents-in-law and children-in-law's siblings. In the first place, three Yuman languages, Yuma (15d), Kamia (15c), and Cocopa, do not recognize these as relatives, possibly due to the absence of the levirate.

There is one widespread type (A) of classification in which siblings' parents-in-law are equated to parents-in-law and children-in-law's siblings equated to children-in-law. This is adhered to by twenty-five tribes. These tribes, with one exception, lie north of the latitude of San Francisco, and are identical, for the most part, with those following the commonest type of classification for parents-in-law's siblings.<sup>57b</sup>

A second type (B) adhered to by five groups (Luiseño, 21p; Northern Diegueño, 15a; Southern Diegueño, 15b; Northern Pomo, 10a; Central Pomo, 10b) also identifies the collateral relatives under discussion with the parents- and children-in-law. The identification disregards the sex of the speaker in the senior generation, a woman's brother's parent-in-law being denoted by the term for man's parent-in-law instead of woman's.

In the junior generation the sex of the relative is disregarded, a son-in-law's sister being called son-in-law instead of daughter-in-law.

A third type (C) also followed by five tribes, three northwestern (Hupa, 1c; Yurok, 2a; Karok, 8) and two southern (Cahuilla, 21t; Cupeño, 21q), identifies siblings' parents-in-law and children-in-law's siblings with child's parent-in-law (child's spouse's parent).

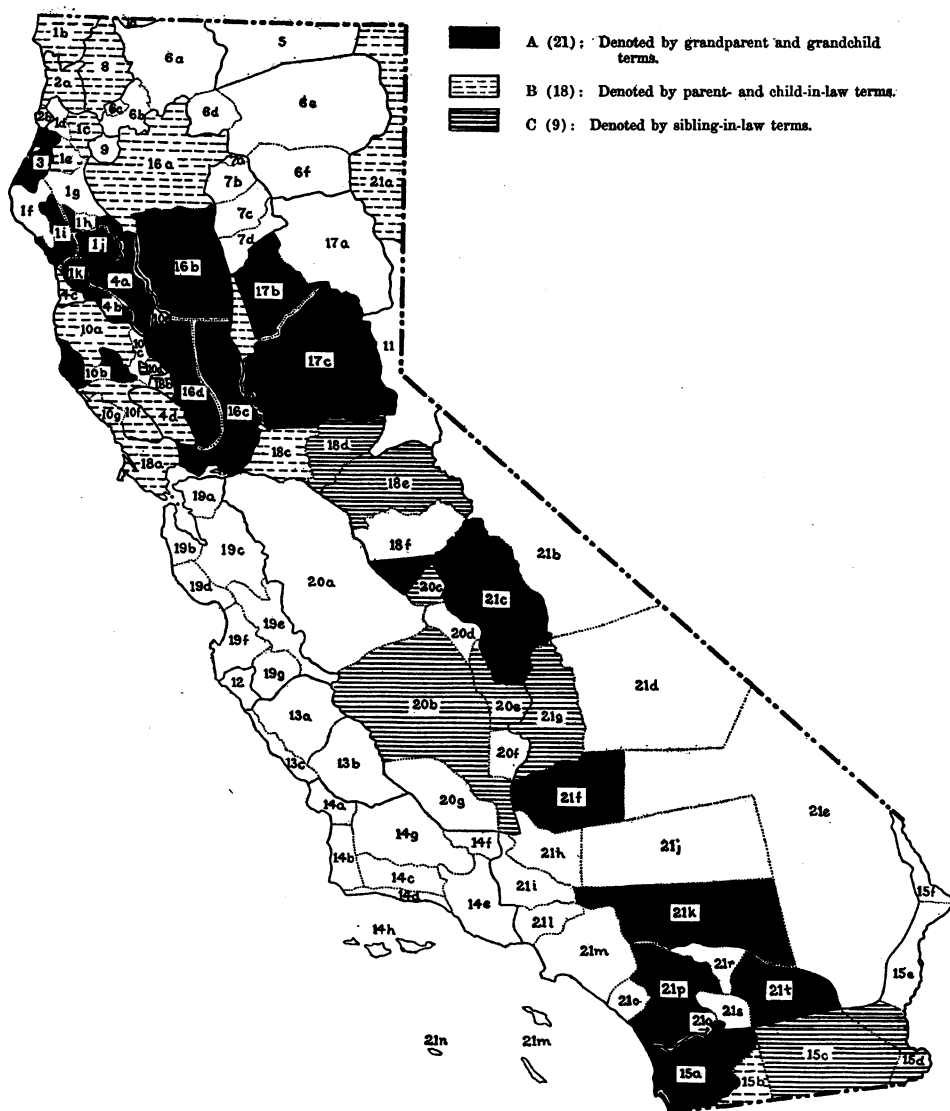
Three groups (type D), Yahi, (7d); Central Miwok (18e), and Serrano (21k), equate the parents-in-law of siblings of like sex to parents-in-law, those of siblings of unlike sex to other relatives. The same holds with the reciprocal relations: son-in-law's brother equals son-in-law; son-in-law's sister equals neither son-in-law nor daughter-in-law, but may be denoted by a special term or equated to child's parent-in-law.

<sup>57b</sup> Tolowa (1b), Whilkut (1e), Lassik (1h), Wailaki (1j), Kato (1k), Wiyot (3), Shasta (6a), Achomawi (6e), Northwestern Maidu (17b), Northeastern Maidu (17a), Southern Maidu (17c), Yaudanchi (20e), Northern Miwok (18d), Lake Miwok (18b), Southern Wintun (16cd), Central Wintun (16b), Northern Wintun (16a), Southeastern Pomo (10d), Southwestern Pomo (10g), Southern Pomo (10f), Wappo (4d), Huchnom (4b), Yuki (4a), Coast Yuki (4c).

## GRANDPARENTS- AND GRANDCHILDREN-IN-LAW

Map 19

There are three types of classification for these relatives by affinity. The first and most popular type (A), followed by twenty-one tribes,



Map 19.—Grandparents-in-law and grandchildren-in-law.

equates them to grandparents and grandchildren. The second type (B), employed by eighteen tribes, equates them to parents- and chil-

dren-in-law. The third type (C) is used by only ten tribes (including the Cocopa) and equates these relatives to siblings-in-law. Type A is found throughout California, type B north of the latitude of San Francisco except for its sporadic appearance among the Southern Diegueño (15b), while type C is found only in south central and southern California. In the latter region it is employed by three Yuman tribes, the Yuma (15d), Kamia (15c), and Cocopa. There it is but an integral part of a more comprehensive phenomenon, namely, the use of certain terms in several classes of relatives by affinity. Hence the southern Californian method is not wholly identical with the south central Californian method in which the terms are much more limited in meaning.

In type A, the southern Californian use of grandparent terms differs from that of the remainder of California. In central and northern California, the ordinary grandparent terms are used, while among the southern California Shoshoneans (21) and the Northern Diegueño (15a) the terms for great and cross-collateral grandparents and grandchildren are used. It is of interest that among the Desert Cahuilla (21t) the terms are varied according as the young couple have or have not issue.

Map 19 shows the distribution of these three types of classification.

## TWO-STEP SIBLINGS-IN-LAW

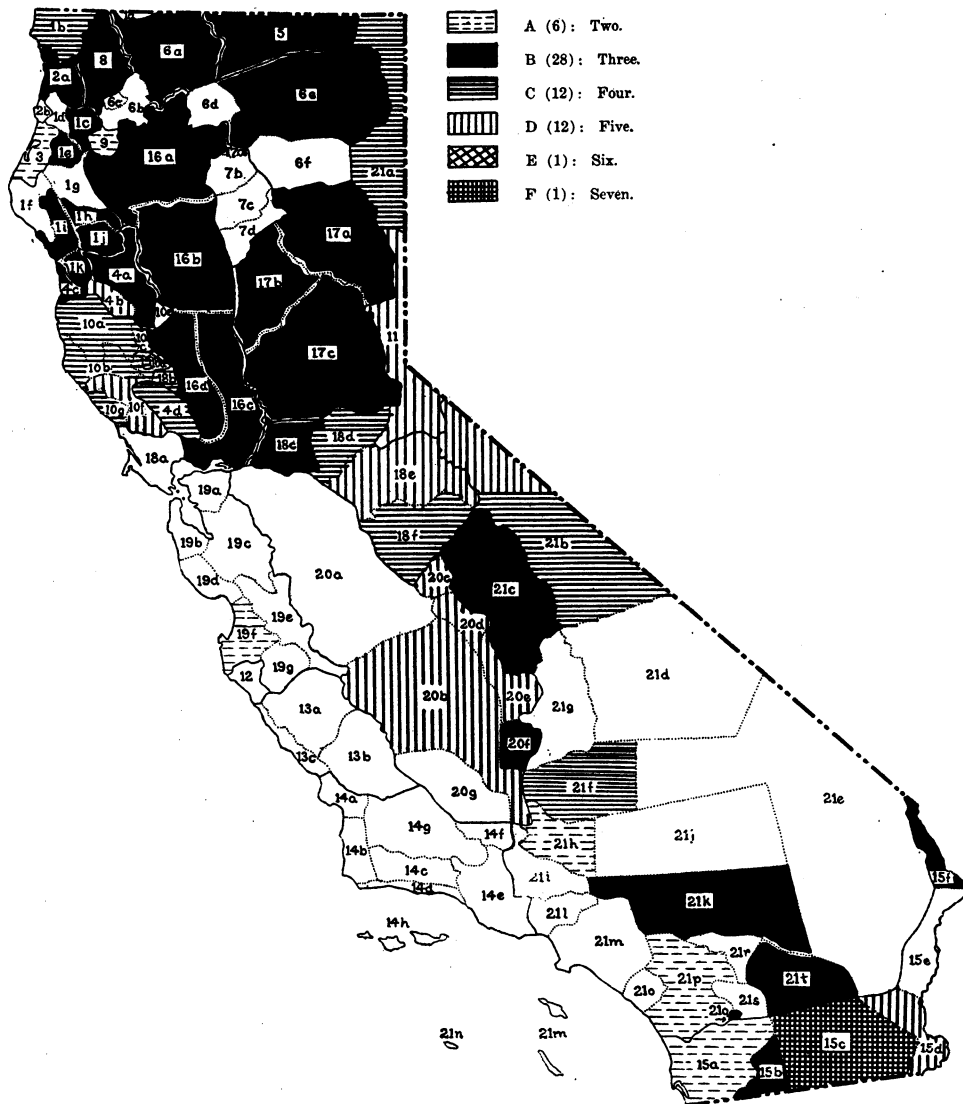
### Maps 20-23

The expression two-step siblings-in-law covers eight relations: wife's brother, man's sister's husband, wife's sister, woman's sister's husband, husband's brother, man's brother's wife, husband's sister, woman's brother's wife. It is possible to combine these eight relations in many ways, thus making numerous types of sibling-in-law designations. In California, among sixty-one tribes (including the Cocopa), there are thirty-three types of designation, nineteen of them monotypic. It is useless to attempt a discussion of thirty-three types of classification, so that our first business must be to find certain underlying bases that are common to a number of types.

The first and most obvious line of attack lies in the matter of the number of terms employed. These range from two to seven. Map 20 shows their distribution. Of the six groups using two terms, I am absolutely certain of only three: Luiseño (21p), Northern Diegueño (15a), and Wiyot (3). The Chimariko (9), Rumsen (19f), and



Kitanemuk (21h) data are perhaps erroneous. Of the twenty-eight groups employing three terms, twenty-one lie north of the latitude of San Francisco. The remaining seven are scattered through south



Map 20.—The number of terms used for two-step siblings-in-law.

central and southern California. Even this mechanical classification according to number of terms seems, therefore, to indicate the prevalence of three-term nomenclature in the northern part of the state. Four-term nomenclature is found in thirteen groups, scattered from

the Tolowa (1b) in the extreme northwest to the Cocopa near the Gulf of California in the extreme southeast. Its particular center seems to be with the Miwok (18) and Pomo (10) tribes of central California, although it is to be noted that three Shoshonean (21) groups also follow it.

Five-term nomenclature is found in twelve groups and seems to have its focal center in south central California, where five out of six Yokuts (20) groups adhere to it. Six terms are employed only by the Southeastern Pomo (10d) and seven by the Kamia (15c).

There are four varieties of two-term nomenclature, fourteen of three-term nomenclature, six of four-term nomenclature, and seven of five-term nomenclature.

All further discussion excludes the three groups from which the data seem doubtful: Chimariko (9), Rumsen (19f), and Kitanemuk (21h), leaving a total of fifty-eight tribes and thirty-one types for consideration. Of these thirty-one types, five are sufficiently widespread to warrant mapping (see map 21).

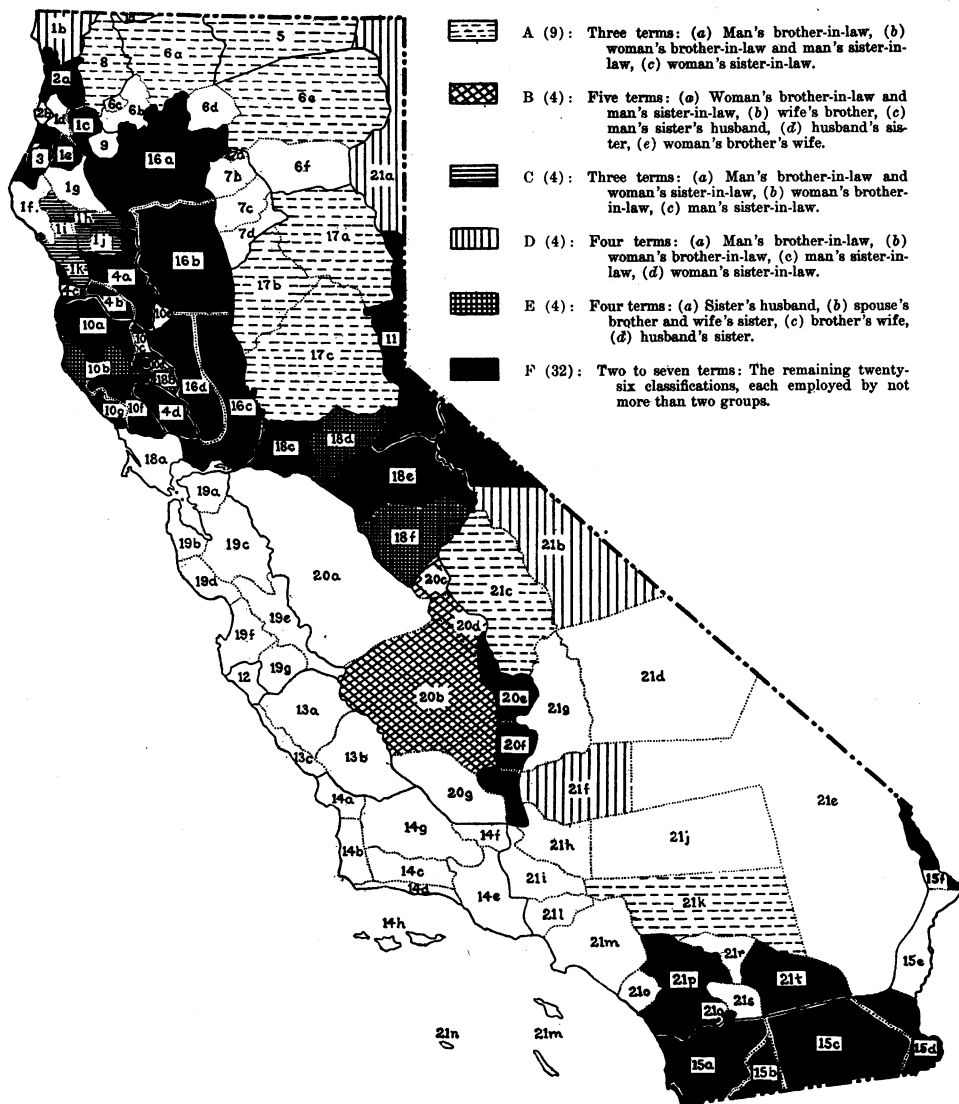
Type A, aside from its sporadic appearance among the Serrano (21k), is found among eight groups in the northern and eastern mountainous parts of the state. It is limited to no one linguistic family, as it is found among Hokan, Lutuamian (5), Penutian, and Shoshonean (21) peoples. Type A is peculiar in that it denotes siblings-in-law of unlike sex by a single self-reciprocal term. Those of like sex are denoted by two terms: man's brother-in-law, woman's sister-in-law.

Type B, with five terms, has one bond in common with type A: siblings-in-law of unlike sex are denoted by a single self-reciprocal term. Those of like sex are denoted by four terms instead of two as in type A. There are two terms for man's brother-in-law and two for woman's sister-in-law. Aside from its presence in Northern Yana (7a), this type is limited to three adjoining Yokuts tribes: Tachi (part of 20b), Gashowu (20d), and Chukchansi (20c).

Type C, although employing three terms also, is just the reverse of type A. Type A unites siblings-in-law of unlike sex in a single term and employs separate terms for those of like sex. Type C unites those of like sex and employs separate terms for those of unlike sex. It is peculiar to four southern Athabascan groups (1hijk).

Type D is a symmetric affair having two brother-in-law terms and two sister-in-law terms, the members of each pair used respectively by a man and by a woman. It has a curious, discontinuous, marginal distribution, being employed by one Athabascan (1b) tribe and three Shoshonean tribes (21a, 21f, and part of b).

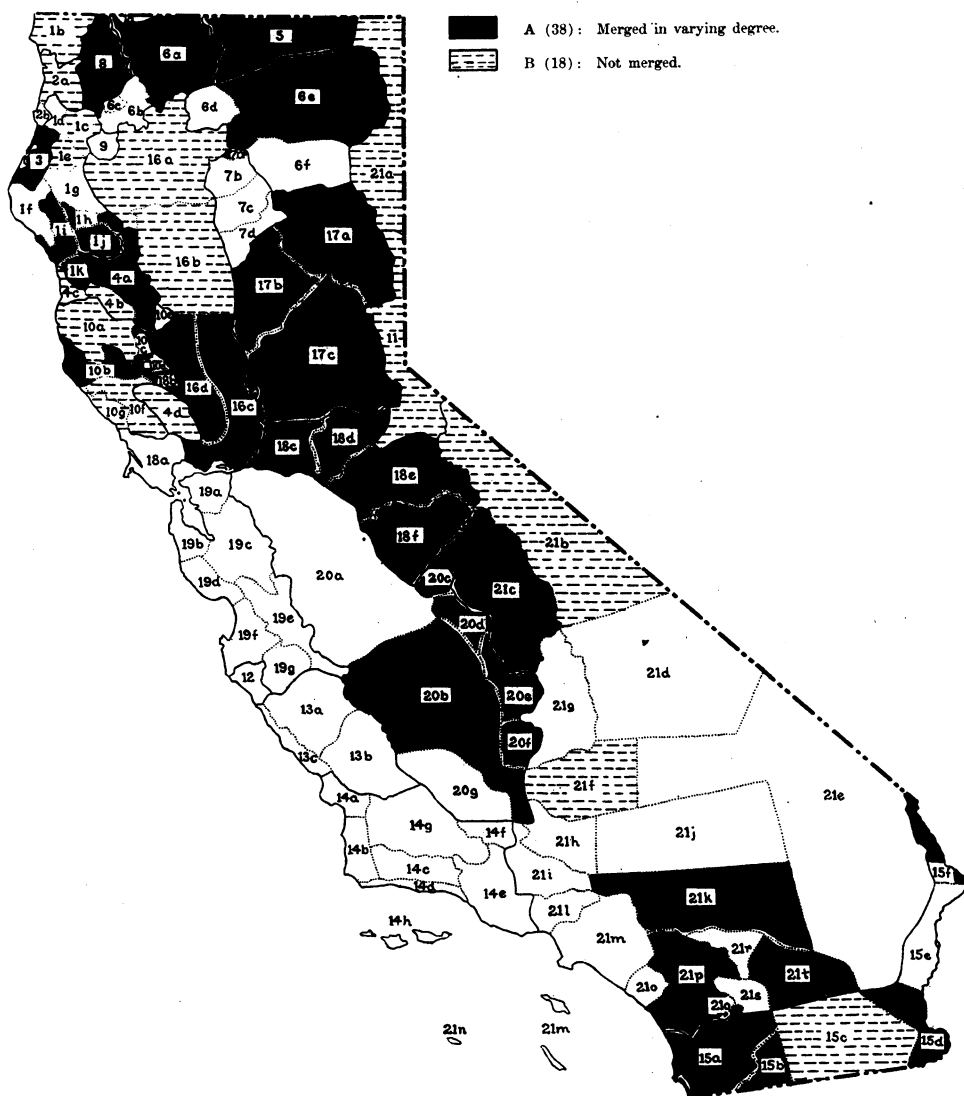
Type E, although employing four terms like type D, is asymmetric, one term denoting three relations, two, each two, and one, one. Aside from its occurrence with the Central Pomo (10b), it is a Miwok scheme, utilized by three out of five Miwok groups (18bdf).



Map 21.—The five chief sibling-in-law classifications.

In addition to the five types (A to E) just discussed, map 21 shows thirty-two tribes among whom twenty-six additional types of classification prevail, no one classification occurring in more than two tribes.

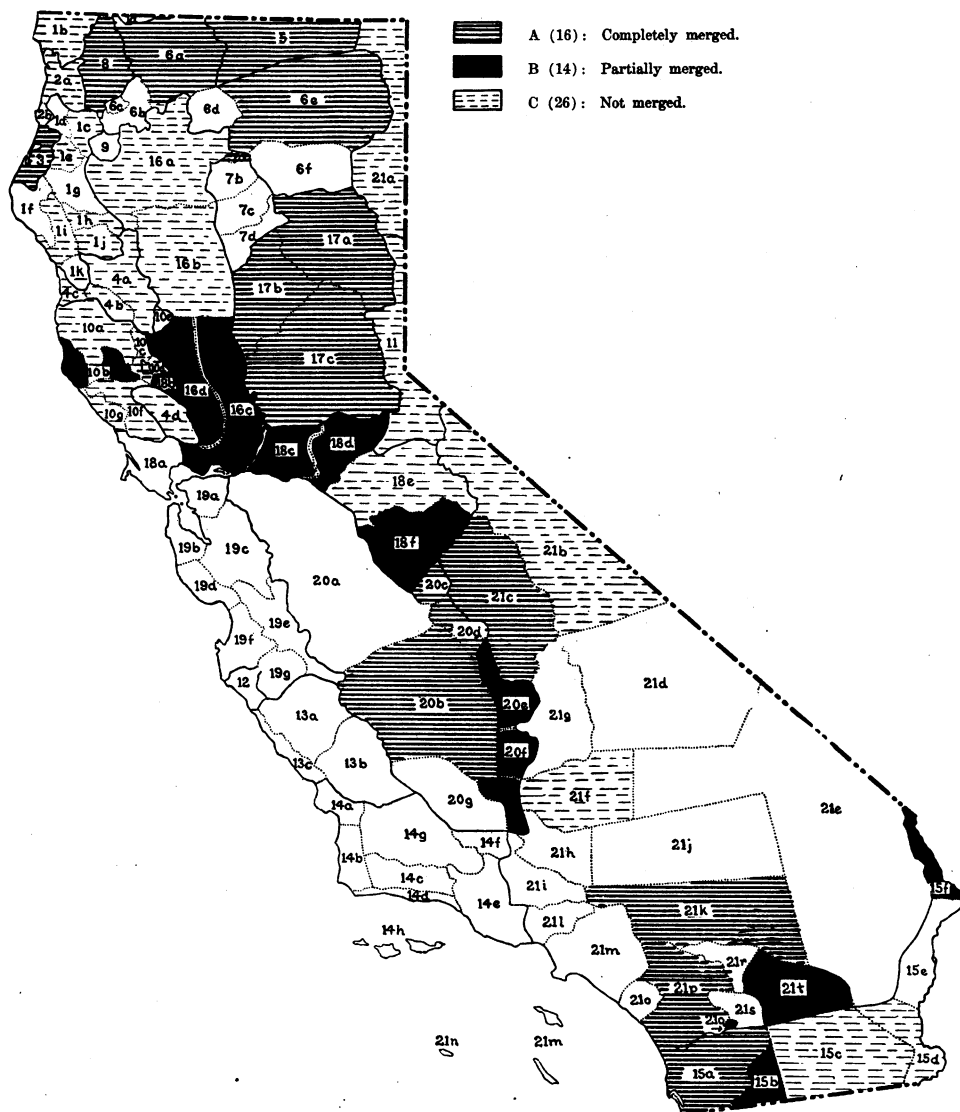
It is of no small interest in this connection that two usually homogeneous areas, the valley kernel of central California and southern California, should be the centers of this horde of conflicting classifications.



Map 22.—The merging of brothers-in-law and sisters-in-law.

Eighteen out of fifty-seven groups carefully observe the category of sex of the relative in denoting siblings-in-law. Thirty-nine groups (including the Cocopa), however, violate this category in varying de-

gree. Map 22 shows the distribution of these two groups of tribes. Adherence to the category is to a considerable extent marginal, thus giving the appearance that violation of the category is typically Cali-



Map 23.—The merging of woman's brother-in-law and man's sister-in-law.

fornian. Six linguistic families both observe and violate the category. Lutuamian (5) is the only family that is consistent, and it is monotypic.

Of the thirty-nine groups which violate the category sex of relative in varying degree, sixteen do so by completely merging woman's

brother-in-law and man's sister-in-law, fifteen (including the Cocopa) do so by partially merging these relatives, eight do so by merging other siblings-in-law of unlike sex. The denoting of woman's brother-in-law and man's sister-in-law, in other words, the cross-siblings-in-law, by a single term, or at least their partial uniting, seems to be largely responsible for the violations of the category sex of relative shown on map 22.

The situation with regard to the cross-siblings-in-law in particular is shown on map 23. As stated above, sixteen groups completely merge these relatives, fifteen do so partially, and twenty-six do not. An inspection of map 23 will show that most of the groups which merge partially are in positions intermediate between those which merge wholly and those which do not merge. Both phenomena are present throughout the entire length of the state. It is worth noting that no Athabascan (1) or Yukian (4) group merges cross-siblings-in-law.

A comparison of maps 22 and 23 will show that eighteen of the twenty-six groups which do not merge cross-siblings-in-law merge no siblings-in-law of unlike sex whatever. This leaves us eight groups which merge siblings-in-law of unlike sex, but not cross-siblings-in-law, that is, not man's sister-in-law and woman's brother-in-law. These eight groups are Lassik (1h), Wailaki (1j), Sinkyone (1i), Kato (1k), Yuki (4a), Eastern Pomo (10e), Central Miwok (18e), and Yuma (15d). The first four groups, all Athabascan, unite the parallel siblings-in-law, that is, man's brother-in-law and woman's sister-in-law, in a single term. They are the only Californian groups which do so. Yuki does so in part and perhaps due to Athabascan example. Central Miwok unites wife's siblings in one term, Yuma unites husband's siblings, and Eastern Pomo does both.

### THREE-STEP SIBLINGS-IN-LAW

There are four of these relatives to be considered in the present section. They are respectively (1) wife's brother's wife, (2) husband's sister's husband, (3) wife's sister's husband, and (4) husband's brother's wife. Wife's brother's wife and husband's sister's husband are reciprocal to each other. Wife's sister's husband and husband's brother's wife are self-reciprocal in meaning. The Wiyot (3) employ no terms for these four relatives by marriage.

Data for (1) wife's brother's wife and (2) husband's sister's husband were obtained from only ten tribes. One tribe, the Northern

Pomo (10a), employs a special term which also denotes relations 3 and 4. Lassik (1h), Wailaki (1j), Lake Miwok (18b), and Yuki (4a) employ sibling terms. Central Pomo (10b) denotes wife's brother's wife as mother-in-law if that relative married before the speaker and as daughter-in-law if she married after the speaker. The reciprocal terms son-in-law and father-in-law apply to the husband's sister's husband. Wappo (4d) does likewise, except that relative age is substituted for priority of marriage. From three other tribes I obtained a similar classification, but without the age or priority of marriage factor: Southeastern and Southern Pomo (10df) designate relative 1 as mother-in-law, relative 2 as son-in-law; Northern Miwok (18d) designates relative 1 as daughter-in-law, relative 2 as parent-in-law. I suspect that in these three cases my data are incomplete and that fuller information would reveal a scheme similar to that of Central Pomo (10b) or Wappo (4d).

Twenty-three groups employ a single term which means wife's sister's husband or husband's brother's wife. Often the term is a unique one; frequently it means co-wife or co-spouse; and rarely it is a sibling or cousin term. The groups employing unique terms are the Hupa (1c), Whilkut (1e), Lutuami (5), Eastern Mono (21b), Desert Cahuilla (21t), Cupeño (21q), Yaudanchi (20e), Southeastern Pomo (10d), Southern Pomo (10f). The Northern Miwok (18d) use a term which also denotes co-wife or co-husband. The following groups use terms which also mean co-wife, but nothing more: Lassik (1h), Shasta (6a), Achomawi (6e), Serrano (21k), Lake Miwok (18b), Wappo (4d). Northern Pomo (10a), as I have already mentioned, employs a term which also denotes wife's brother's wife and husband's sister's husband. Yuma (15d) uses a term which is applied to six other relatives by marriage: brother's wife, grandson's wife, nephew's wife, uncle's wife, daughter-in-law, and step-mother. Southern Diegueño (15b) employs a term which means also wife's sibling and child's parent-in-law. Northeastern Maidu (17a) uses a term which means sibling, Tachi (part of 20b) a term which means cross-cousin of like sex. Northern Wintun (16a) utilizes a term, also applied to co-wife or co-husband, which signifies parallel cousin of like sex and step-sibling of like sex; the four usual sibling terms are also employed. Western Mono (21c) employs the term for sibling of like sex, which also means co-wife and co-husband. This concludes our catalogue of tribes employing a single term for the two relations, wife's sister's husband and husband's brother's wife.

We are now prepared to take up the twenty-two tribes which employ two terms for these two relations. Tolowa (1b), Karok (8), and Coast Yuki (4c) each employ two special terms. Incomplete data from the Sinkyone (1i) and the Southern Miwok (18f) reveal a special term at least for wife's sister's husband. Eight tribes employ sibling terms for these relatives usually on the basis of relative age: Northwestern Maidu of the plains (part of 17b), Southern Maidu (17c), Luiseño (21p), Gashowu (20d), Central Wintun (16b), Northern Wintun (16a), Huchnom (4b), and Yuki (4a). Several of these groups also apply sister terms to co-wives. The Northern Diegueño (15a) denote the wives' sister's husband by a sibling-in-law term, the husband's brother's wife by a sister term. The Central Miwok (18e) employ a special term for the former and the term for later co-wife for the latter. The Southeastern and Southwestern Wintun (16cd) employ the term for co-wife or co-husband for wife's sister's husband. Their term for husband's brother's wife is in doubt. Kato (1k) and Wailaki (1j) use for these two relations the terms for man's male cross-cousin and woman's female cross-cousin, respectively. The latter also applies to the co-wife. The Northwestern Maidu of the mountains (part of 17b) employ great grandparent terms. These also are utilized for co-wife and co-husband. The Yurok (2a) use sibling-in-law terms and the Central Pomo (10b) parent-in-law terms. These last are applied according to priority of marriage. Thus, of the husbands of two sisters, the first-married will be father-in-law, the second-married son-in-law.

#### CHILDREN'S PARENTS-IN-LAW

Most Californian languages have a special term employed between the parents of a husband and wife. Fifty-one out of fifty-four groups employ such a special term. Forty-four of these groups apply it exclusively to this relation. Seven groups employ it also for collateral parents and children-in-law: Hupa (1c), Yurok (2a), Karok (8), Serrano (21k), Desert Cahuilla (21t), Cupeño (21q), Central Miwok (18e).

Three groups possess no special designation for this relation. One, the Southern Diegueño (15b), employs a sibling-in-law term. The two others, Central and Northern Wintun (16ba), employ parent-in-law terms.



### TRIBAL DEGREE OF SPECIALIZATION

Having now considered in more or less detail the various types of classification for the principal groups of relatives, it is of considerable interest to know which groups are the most specialized and which the least, *so far as California is concerned*. I realize that the comparison, which I have undertaken and which I present below, is vitiated in large degree by geography. One would expect the Yuma, for example, to be quite un-Californian, since they are so thoroughly marginal and in a measure isolated. Our comparison from the outset takes on an arbitrary aspect from the very fact that it is limited to a modern political area. A scientifically accurate comparison should embrace the kinship systems of all America, and even then it would be open to the charge of insufficient data. The specialization of the Yuma, therefore, is relative only to California. If Arizona, Nevada, Lower California, and Sonora were embraced in the comparison, the result for Yuma, in fact for every tribe, would be different.

I have introduced a second arbitrary factor by limiting my comparison to fifty groups from whom the data were sufficiently complete. Next I selected thirty-seven characters<sup>58</sup> on which I had data from the fifty tribes.<sup>59</sup>

With these limitations in mind, let us proceed to a description of the method of comparison and a presentation of the results. A co-ordinate sheet was employed for each of the thirty-seven characters. The fifty tribes were listed at the left and again across the top. Checks were placed in the squares to indicate the possession of a character in common by two tribes. Thus, if Tolowa and Southeastern Wintun both classified father's sister as older sister, a check was entered in

<sup>58</sup> (1) Parents, (2) father equated to son, (3) mother equated to daughter, (4) children, (5) grandparents, (6) grandchildren, (7) self-reciprocity in grand-parent terms, (8) grandchildren equated to children, (9) great grandparents, (10) siblings, (11) half-siblings, (12) supernumerary sibling terms, (13) uncles and aunts, (14) self-reciprocity in uncle-aunt terms, (15) father's brother equated to father, (16) mother's sister equated to mother, (17) father's sister equated to older sister, (18) mother's brother equated to grandfather, (19) parallel nephew-nieces, (20) parallel nephew-niece equated to offspring, (21) cross-nephew-nieces, (22) merging of parallel and cross nephew-nieces, (23) parallel cousins, (24) cross-cousins, (25) step-father and reciprocal, (26) step-mother and reciprocal, (27) step-siblings, (28) mother's sister's husband, (29) father's brother's wife, (30) father's sister's husband, (31) mother's brother's wife, (32) parents-in-law, (33) children-in-law, (34) siblings-in-law, (35) merging of brother- and sister-in-law, (36) number of sibling-in-law terms, (37) child's parent-in-law.

<sup>59</sup> Even then it was necessary to hypothesize here and there.

the square which had Tolowa listed in the left margin and Southeastern Wintun at the top, and again in the square which had Tolowa listed at the top and Southeastern Wintun at the left. After all entries were made the number of tribes with which Tolowa possessed this character in common was ascertained by counting the check marks in line with Tolowa, both vertically and horizontally, one count serving as a check against the other. The same was done with each of the fifty tribes for each of the thirty-seven characters.

The next step was to add the thirty-seven totals for each of the fifty tribes. The grand total in each instance is the sum of the number of tribes with which each tribe possesses the thirty-seven characters in common. It is therefore an index to the degree of specialization of each tribe. The tribe with the lowest grand total is the most specialized so far as California is concerned, and the least representative for the state as a whole; the tribe with the highest grand total is least specialized and the most representative for the state. The tribe with the lowest grand total has the fewest points in common with the other Californian kinship systems; the tribe with the highest grand total has the most points in common. The grand totals for the fifty tribes follow.

Yuma.....	708	Southern Diegueño .....	928
Wiyot.....	767	Kawaiisu.....	929
Serrano.....	781	Northern Wintun.....	946
Desert Cahuilla.....	804	Yuki.....	949
Cupeño.....	804	Chukchansi.....	950
Karok.....	816	Hupa.....	953
Luiसेño.....	837	Northern Diegueño.....	961
Southern Miwok.....	857	Yaudanchi.....	963
Kamia.....	860	Kato.....	964
Southeastern Wintun.....	862	Southwestern Pomo.....	964
Southwestern Wintun.....	862	Huchnom.....	965
Tübatulabal.....	866	Lake Miwok.....	967
Tolowa.....	869	Northeastern Maidu.....	970
Central Pomo.....	869	Eastern Mono.....	978
Yurok.....	871	Yauelmani.....	978
Coast Yuki.....	878	Whilkut.....	986
Southern Pomo.....	884	Lassik.....	991
Lutuami.....	886	Wailaki.....	994
Wappo.....	893	Western Mono.....	1002
Southeastern Pomo.....	897	Southern Maidu.....	1009
Achomawi.....	914	Northwestern Maidu.....	1010
Central Miwok.....	914	Gashowu .....	1018
Central Wintun.....	914	Northern Pomo.....	1018
Shasta.....	917	Sinkyone.....	1019
Northern Miwok.....	919	Tachi.....	1025

That the Yuma kinship system is the most specialized might be half expected from the remote position of that group in the southeastern corner of the state. But that Wiyot should be a close second to Yuma is rather unexpected, since Wiyot has as neighbors several unspecialized Athabascan tribes, and since the one remaining linguistically related neighbor, Yurok, is less specialized than Wiyot by ninety units. Clearly some factor, not apparent on the surface, has entered into the Wiyot situation. The next most specialized tribes are three Southern California Shoshonean groups, Serrano, Desert Cahuilla, and Cupeño. Luiseño is separated from these three in the preceding list by the more specialized Karok. Of the seven most specialized tribes just considered, five are southern Californian and two northwestern Californian.

At the opposite end of the series we find that the seven least specialized tribes range from 1025 to 1002. All are within the Central California culture area: Tachi, Sinkyone, Northern Pomo, Gashowu, Northwestern Maidu, Southern Maidu, Western Mono. It is of especial interest to note that here language is no barrier to assimilation of characters. Our seven groups belong to four major linguistic groups: Penutian, Athabascan, Hokan, Shoshonean.

The thirty-six remaining groups range from 857 (Southern Miwok) to 994 (Wailaki). Tribes from all of the various culture areas are included.

The maximum range of variation for the culture areas is as follows:

TABLE 1

## RANGE OF KINSHIP SPECIALIZATION BY CULTURE AREAS

<i>Culture Areas</i>	<i>Lowest</i>	<i>Highest</i>	<i>Mean</i>
Southern California.....	708	961	835
Northwestern California.....	767	986	877
Central California.....	857	1025	941

As might be expected, the Central Californian area is, on the whole, the least specialized and the most typical of the state.

It is of interest, too, to inspect our sum totals with linguistic relationships in mind. The following table presents the lowest (most specialized) and highest (least specialized) figures for several of the linguistic groups concerned.

TABLE 2

## RANGE OF KINSHIP SPECIALIZATION BY LINGUISTIC FAMILIES

<i>Linguistic group</i>	<i>Lowest</i>	<i>Highest</i>
Athabascan .....	Tolowa..... 869	Sinkyone..... 1019
Shoshonean.....	Serrano..... 781	Western Mono..... 1002
Yukian.....	Coast Yuki..... 878	Huchnom..... 965
Penutian.....	Southern Miwok..... 857	Tachi..... 1025
Maidu.....	Northeastern..... 970	Southern Maidu..... 1009
Wintun.....	Southern Wintun..... 862	Northern Wintun .... 946
Miwok.....	Southern Miwok..... 857	Lake Miwok..... 967
Yokuts.....	Chukchansi..... 950	Tachi..... 1025
Hokan.....	Yuma..... 708	Northern Pomo..... 1018
Yuman.....	Yuma..... 708	Northern Diegueño.. 961
Pomo.....	Central Pomo..... 869	Northern Pomo..... 1018
Northern California Hokan	Karok..... 861	Shasta..... 917

It is notable that four of the five major linguistic groups have members with a maximum of over one thousand units, showing clearly an approximation to the general Californian type. These four major linguistic groups are Athabascan, Shoshonean, Penutian, and Hokan. The members of these four groups which have over a thousand units in common with all other Californian groups all lie within the Central California culture area. The processes of assimilation seem to have been strong within this area.

## INTERRELATIONS OF KINSHIP SYSTEMS

The same data that furnished us figures upon the degree of specialization of each kinship system relative to forty-nine others scattered broadcast over California were employed in the present connection to determine the interrelations of these fifty systems. The number of characters that each of the fifty tribes had in common with each of the remaining forty-nine was ascertained by noting down the correspondence for each of the thirty-seven characters listed in the footnote on page 193. Thus it was ascertained that Hupa and Whilkut had thirty-six out of the thirty-seven in common, that Wiyot and Serrano had nine out of the thirty-seven in common, and so on. No two groups had fewer than nine characters in common. Absolute identity, on the other hand, was found in but one instance, South-eastern and Southwestern Wintun.

The absolute figures, which therefore range from nine to thirty-seven, have been changed to percentages. The interrelations of fifty Californian kinship systems, expressed in percentages of characters in

**TABLE 3**  
**INTERRELATIONS OF FIFTY CALIFORNIAN KINSHIP SYSTEMS**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
1	Hupa.....																																																				
2	Whilkut.....	97																																																			
3	Tolowa.....	73	76																																																		
4	Lassik.....	65	68	57																																																	
5	Sinkyone.....	68	70	59	89																																																
6	Wailaki.....	62	65	54	89	92																																															
7	Kato.....	59	62	54	92	92	92																																														
8	Wiyot.....	43	46	41	41	43	41	41																																													
9	Yurok.....	57	54	49	46	49	46	43	65																																												
10	Karok.....	62	59	51	43	43	43	38	38	51																																											
11	Shasta.....	43	46	43	54	54	57	54	35	41	51																																										
12	Achomawi.....	49	51	49	46	49	49	46	43	49	62	68																																									
13	Lutuami.....	46	49	41	43	46	46	43	43	43	54	65	73																																								
14	Northwestern Maidu.....	57	59	51	65	68	68	65	43	43	49	73	62	62																																							
15	Northeastern Maidu.....	51	54	57	62	65	65	65	41	46	49	70	59	54	76																																						
16	Southern Maidu.....	54	57	43	62	65	68	65	43	43	54	70	62	62	79	76																																					
17	Eastern Mono.....	46	49	49	49	54	51	49	38	49	46	59	59	54	59	57	62																																				
18	Western Mono.....	49	51	41	54	59	57	54	35	46	51	70	65	59	70	68	73	84																																			
19	Kawaiisu.....	46	49	46	43	46	43	43	38	43	43	57	59	57	57	46	57	65	57																																		
20	Tubatulabal.....	38	41	41	35	41	38	38	30	43	38	51	57	54	51	49	49	65	59	65																																	
21	Serrano.....	35	35	35	35	38	38	38	24	35	43	49	49	43	43	49	43	41	46	54	46																																
22	Desert Cahuilla.....	41	38	32	38	41	41	41	24	32	38	43	43	46	43	43	43	38	41	57	43	86																															
23	Cupeño.....	38	35	30	38	41	41	41	24	32	38	43	43	46	43	43	38	41	57	43	84	92																															
24	Luisefño.....	32	35	32	38	41	41	41	35	30	38	49	49	49	46	49	49	43	46	59	46	89	81	81																													
25	Yuma.....	38	41	41	38	38	38	38	32	30	27	35	35	41	38	41	38	30	27	41	38	35	41	43	41																												
26	Kamia.....	46	49	51	43	43	43	43	35	38	35	43	46	49	46	49	46	43	38	51	46	46	51	54	51	68																											
27	Southern Diegueño.....	46	46	43	46	51	49	49	35	41	38	46	46	54	51	57	49	49	62	49	59	65	68	59	49	68																											
28	Northern Diegueño.....	43	46	49	46	51	49	49	43	38	38	49	51	54	54	57	54	49	49	62	51	65	68	70	76	57	73	81																									
29	Yauelmani.....	54	57	54	57	57	54	54	43	49	51	57	59	51	59	59	59	59	62	49	54	41	41	41	41	38	46	46	49																								
30	Yaudanchi.....	51	54	49	54	51	51	38	43	49	59	57	49	59	57	57	62	65	49	59	38	38	38	32	41	43	43	89																									
31	Tachi.....	51	54	46	59	57	57	54	51	51	49	54	51	49	54	54	57	59	62	46	43	35	35	35	43	38	46	43	49	65	65																						
32	Gashowu.....	51	54	43	59	57	57	54	49	49	46	54	49	46	54	54	59	62	68	43	41	32	32	32	41	35	43	41	46	65	65	92																					
33	Chukchansi.....	46	49	38	51	49	49	46	43	46	41	46	43	41	46	46	51	54	62	41	41	32	32	32	41	32	41	38	43	57	57	84	92																				
34	Southern Miwok.....	38	41	35	38	38	35	32	41	49	35	32	35	38	41	35	43	54	51	43	43	24	30	30	32	30	35	41	38	43	43	59	62	70																			
35	Central Miwok.....	49	46	35	46	46	43	41	41	51	43	35	38	38	43	38	46	54	54	46	43	32	35	35	35	32	38	46	43	49	49	65	68	73	76																		
36	Northern Miwok.....	43	46	41	43	43	41	38	38	43	41	35	41	41	46	43	49	57	51	51	46	30	45	35	38	32	41	49	46	49	54	59	62	65	84	76																	
37	Lake Miwok.....	49	51	46	49	49	46	43	46	54	38	35	41	41	46	41	38	46	41	51	49	41	46	46	35	43	54	57	51	57	62	59	57	65	57	68																	
38	Southeastern Wintun.....	41	43	35	54	51	51	49	30	38	30	43	32	35	49	43	49	49	59	32	41	24	30	30	27	24	32	38	32	51	57	62	68	62	59	54	57	62															
39	Southwestern Wintun.....	41	43	35	54	51	51	49	30	38	30	43	32	35	49	43	49	49	59	32	41	24	30	30	27	24	32	38	32	51	57	62	68	62	59	54	57	62	100														
40	Central Wintun.....	54	54	46	62	59	62	57	35	46	41	43	38	35	51	49	51	46	49	35	38	27	30	30	27	27	38	38	35	54	59	68	68	59	46	54	51	59	76	76													
41	Northern Wintun.....	51	51	41	57	59	59	57	46	54	41	51	41	41	57	57	65	57	59	46	38	38	43	43	43	32	46	54	49	51	46	62	62	54	46	54	46	41	59	59	68												
42	Southeastern Pomo.....	51	54	51	51	51	49	43	54	41	46	46	41	49	54	54	49	57	54	49	49	32	30	30	35	32	43	43	46	54	51	59	59	62	57	65	62	57	43	43	54	49											
43	Central Pomo.....	43	46	43	43	43	41	38	46	46	30	30	35	35	43	32	32	43	38	46	46	27	32	30	32	27	35	43																									

common, are presented in table 3. In the discussion of the social and linguistic determinants of kinship systems we shall have occasion to draw upon this table for evidence.

#### CONCEPTUAL INTERRELATIONS

This section is based on data from fifty Californian peoples, whose names are given in table 3. Thirty-seven kinship concepts or characters on which I have data from the fifty tribes have been utilized in determining the interrelation of each kinship system with each of the remaining forty-nine. The thirty-seven kinship concepts employed are all of a classificatory nature.

(1) Parents, (2) father equated to son, (3) mother equated to daughter, (4) children, (5) grandparents, (6) grandchildren, (7) self-reciprocity in grandparent terms, (8) grandchildren equated to children, (9) great grandparents, (10) siblings, (11) half-siblings, (12) supernumerary sibling terms, (13) uncles and aunts, (14) self-reciprocity in uncle-aunt terms, (15) father's brother equated to father, (16) mother's sister equated to mother, (17) father's sister equated to older sister, (18) mother's brother equated to grandfather, (19) parallel nephew-nieces, (20) parallel nephew-niece equated to offspring, (21) cross-nephew-nieces, (22) merging of parallel and cross-nephew-nieces, (23) parallel cousins, (24) cross-cousins, (25) step-father and reciprocal, (26) step-mother and reciprocal, (27) step-siblings, (28) mother's sister's husband, (29) father's brother's wife, (30) father's sister's husband, (31) mother's brother's wife, (32) parents-in-law, (33) children-in-law, (34) siblings-in-law, (35) merging of brother- and sister-in-law, (36) number of sibling-in-law terms, (37) child's parent-in-law.

That but two out of fifty kinship systems, and those two of closely related dialects, are conceptually identical is *prima facie* evidence that a kinship system as a whole is not a cultural trait which is subject to adoption by neighboring groups. Clearly, the native does not think in terms of the kinship system as a whole; he thinks in terms of its constituent parts. What a neighboring tribe adopts and implants in its own peculiar system is isolated features. It is obvious, then, that a kinship system as it stands today is not a wholly indigenous product of the group using it. It has been subject to modifications from without, and it is the object of this paper to measure and express mathematically the extent of the modifications. These modifications are naturally not all of the same age, and stratification is therefore a

feature of kinship systems, as of other cultural complexes; but it is an exceedingly difficult matter to arrange the strata in their true time perspective.

I should like to cite two modern cases of modification through contact, which came to my notice in the field. The Yurok have no terms for the spouses of uncles and aunts, but those Yurok in contact with the Hupa are now adopting Hupa usage and designating them by sibling-in-law terms. The Sierra Miwok formerly, and to some extent at present, denoted the father's brother as father. The tendency now is to employ instead the borrowed Mono term *haiyi*, undoubtedly the result of modern contact and intermarriage. This borrowing may have received an impetus, too, from European example, for one old woman expressed herself in terms of unmeasured contempt, when I questioned her use of the term *haiyi* instead of the Miwok word *üpü* (father) for father's brother: "How many fathers you think I got?" Yet again this change may also be a direct reaction to the abandonment of the levirate.

Perusal of the maps of this paper emphasizes the fact that language is no barrier to the diffusion of the ideas which shape even such essentially linguistic phenomena as designations for relatives. In the discussion of the individual kinship systems and in the sections on Types of Classification and their Distribution I have called attention to numerous instances of the diffusion of characters. I believe it would serve no useful purpose to here present a catalogue of these cases, so I purpose to attack the problem in an entirely different manner. By means of percentages I hope to show what the sum total of influence of contiguous groups upon one another has been.

First, I should like to discuss the interrelations of the groups within the recognized culture areas: Central California, Southern California, Northwestern California,<sup>60</sup> although I realize that this treatment of kinship systems by culture areas is not wholly satisfactory because of the intergradation with neighboring areas as one leaves the culture center.

The figures for the interrelations of the tribes of the Northwestern California culture area are shown in numbers 1-3, 8-10, of table 3. The tribes represented in the table are the Hupa, Whilkut, Tolowa, Wiyot, Yurok, and Karok.<sup>61</sup>

<sup>60</sup> For maps of these culture areas see A. L. Kroeber, *California Culture Provinces*, present series, xvii, 153, 167, 1920.

<sup>61</sup> Dr. Kroeber places the culturally intermediate Shasta in the Northwestern culture area. I have departed from this by treating them as in the Central culture area along with their congeners the Achomawi.

Of these six groups within the Northwestern California culture area, Hupa and Whilkut would seem to be most representative, as each has an average of 66 per cent of its kinship system in common with the other five groups. This high percentage is in a measure due to the fact that these two alone have 97 per cent in common. The next most representative group is Tolowa with 58 per cent, then follow Yurok with 55, Karok with 52, and Wiyot with 47. Linguistic relationship gives the three Athabascan groups a numerical preponderance and makes them the most representative group for the area as a whole. Wiyot, with an average of 47 per cent shared with the five other groups, is the least representative. Actually, Wiyot falls below this average with all groups except Yurok, where it ascends to 65, an index undoubtedly due to linguistic relationship, although not a startlingly high one. Wiyot and Karok, with only 38 per cent of characters in common, are the least closely related pair of tribes in the area. Wiyot bears unmistakable evidence of isolation from the other tribes of the area, while Hupa and Whilkut show with equal clearness the influence of their neighbors with the exception of Wiyot.

For the area as a whole 57 is the average percentage of common characters between the various groups. This figure is actually exemplified in the relations of Yurok and Hupa. The range of percentages within the culture area is 59 (97 Hupa-Whilkut to 38 Wiyot-Karok). Compared with our next area, Southern California, Northwestern California is less homogeneous. Its average as just stated is 57 while that of Southern California is 64. The fact that there are but two linguistic families in the south is very likely responsible for the greater homogeneity of the area.

The interrelations of the kinship systems of the Southern California culture area are to be found in numbers 21-28 of table 3. The tribes of that area represented in the table are the Serrano, Desert Cahuilla, Cupeño, Luiseño, Yuma, Kamia, Southern Diegueño, and Northern Diegueño.

In the Southern Californian area we find but two linguistic stocks (Shoshonean and Yuman) in place of the four in the Northwestern area. Each stock is represented by four tribes. This fact, as already suggested, leads one to expect greater homogeneity than in the northwest. The range for the area is slightly less to begin with, 57 as compared with the Northwestern 59 (92 Cupeño-Desert Cahuilla to 35 Yuma-Serrano). The average, 64, as already pointed out, is higher. Of the two linguistic stocks in the south, Shoshonean is the more



homogeneous with a range of 81 to 92 (average 85.5), as against Yuman 49 to 81 (average 66). Even for southern California alone, as for the whole of California, Yuma is the most specialized group (average interrelation 48). Kamia comes next (59), and then follow with lessening degree of specialization: Southern Diegueño (64), Serrano (66), Luiseño (68), Desert Cahuilla (69), Cupeño (70), and Northern Diegueño (70). The last two, with averages of 70, are most typical of the area as a whole. If we examine in table 3 the percentages for each of the four Yuman groups in relation to the four Shoshonean groups, we find the increase very marked as we proceed westward from the Yuma to the Northern Diegueño, the range being from 35 (Yuma-Serrano) to 76 (Northern Diegueño-Luiseño).

Two factors appear to have contributed to the Yuman heterogeneity, exhibited by the wide range of averages for each of the four Yuman groups in relation to all of southern California, running in ascending order from east to west: Yuma 48, Kamia 59, Southern Diegueño 64, Northern Diegueño 70. In the east there is the internal<sup>62</sup> factor of specialization on the part of the agricultural Yuma. This is responsible for the lack of coördination between Yuma and other southern Californian tribes. In the west, on the other hand, a foreign influence has been at work, which has still further estranged from the Yuma type, and materially altered, the Northern Diegueño kinship system. The source of this foreign influence is not far to seek. Table 3 shows clearly that it is Shoshonean and more specifically Luiseño, for that group shares 76 per cent of its terminology with Northern Diegueño. As a matter of fact the affinities of Northern Diegueño to all four of the Southern California Shoshonean groups are more pronounced than are its affinities with Yuma. Its lowest Shoshonean relation is 65 per cent, with Serrano; while the relation with Yuma falls to 57. Here is an indisputable case of contact overriding language and imparting a foreign color to the greater part of a kinship system. Southern Diegueño differs even more radically from Yuma than does Northern Diegueño, sharing less than 50 per cent of its kinship system with Yuma. The exact source and cause of this divergence are not so apparent as in the case of Northern Diegueño, but presumably they are the same—Yuma specialization and Shoshonean influence. How utterly impotent this Shoshonean influence has been in the case of Yuma is apparent from the fact that Yuma has not

<sup>62</sup> I use this word with reserve, for it is probable that the extra-Californian neighbors of the Yuma have influenced the Yuma kinship system.

more than 43 per cent of its characters in common with any Southern California Shoshonean group.

An examination of the interrelations of the four Yuman tribes reveals Kamia and Northern Diegueño as most typical of the stock in California in spite of the obvious Shoshoneanization of the latter. Yuma appears as least typical. The average interrelation of each tribe with its three fellows is: Yuma 58, Southern Diegueño 66, Kamia and Northern Diegueño 70.

In conclusion, I should like to emphasize the impotency of language as a controlling factor of kinship systems, once acculturation of a given group sets in. Southern California Shoshonean and Yuman show about an equal degree of internal linguistic diversity, yet one group of languages (Shoshonean) with its concomitant kinship systems shows a remarkable homogeneity, while the other (Yuman) shows fully as remarkable a heterogeneity. Considering southern California as a whole, the characters of Shoshonean are dominant, those of Yuman recessive, to use the terms of the experimental biologist. It seems impossible to discern any stratification except in so far as the Shoshonean characteristics displayed by Yuman groups are relatively less ancient (in Yuman groups) than the peculiarly Yuman traits. One is prone to wonder if the Diegueño kinship traits, like certain of their religious traits,<sup>63</sup> may not be of relatively recent introduction from the contiguous Shoshonean groups.

In the two culture areas thus far considered we have discussed fourteen kinship systems. The thirty-six still to be examined all lie within the vast region which is designated as the Central California culture area, or really, in our case, the California-Great Basin area, for the Lutuami and Mono are included. The interrelations of the kinship systems of this region are exhibited by numbers 4-7, 11-20, 29-50, of table 3.

The kinship systems of the Central California area lack the homogeneity of those of the Northwestern and Southern California areas. Expressed mathematically, the average of the interrelations of all Central Californian systems is 52 per cent, as against 57 for Northwestern California and 64 for Southern California. On the other hand, considering that six of the seven Californian linguistic families are found in the Central California area (Algonkin being the only one lacking), the average of 52 after all indicates a high degree of acculturation.

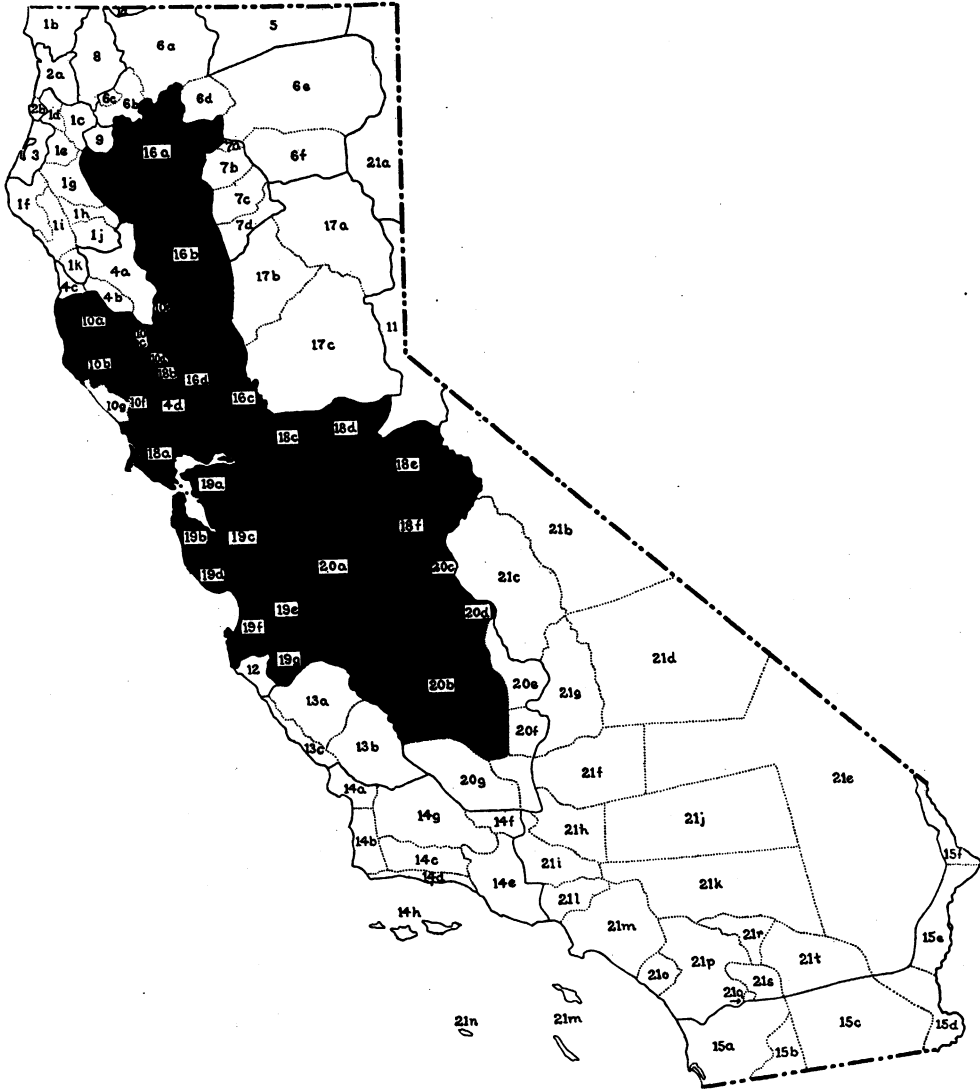
<sup>63</sup> T. T. Waterman, *The Religious Practices of the Diegueño Indians*, present series, viii, 271-358, 1910.

The range of percentages within the area is 68 (100 per cent to 32 per cent), as against Northwestern 59 and Southern 57, a condition to be anticipated, since in the former region we considered but six tribes and in the latter eight, while in Central California we are considering thirty-six. The range of average percentages, however, is low, the magnitude of the series smoothing out the irregularities which would appear in a smaller series. The minimum average is 45 (Central Pomo) and the maximum is 59 (Gashowu). Central Pomo is therefore the most specialized group in the Central California area, Gashowu the most generalized. Tachi is a close second with an average of 58. The average interrelation of each of the remaining groups with all of its thirty-five fellows arranged in the order of listing in table 3 is: Lassik 55, Sinkyone 57, Wailaki 55, Kato 53, Shasta 50, Achomawi 49, Lutuami 47, Northwestern Maidu 56, Northeastern Maidu 53, Southern Maidu 56, Eastern Mono 55, Western Mono 57, Kawaiisu 49, Tübatulabal 47, Yauelmani 54, Yaudanchi 54, Chukchansi 54, Southern Miwok 49, Central Miwok 52, Northern Miwok 52, Lake Miwok 53, Southeastern Wintun 51, Southwestern Wintun 51, Central Wintun 53, Northern Wintun 52, Southeastern Pomo 53, Northern Pomo 57, Southwestern Pomo 52, Southern Pomo 48, Wappo 48, Huchnom 52, Yuki 52, Coast Yuki 47.

In turning the maps which exhibit the distribution of kinship traits, the reader will undoubtedly be struck by the frequent appearance of the elongate area with a northwest-southeast axis running the full length of the great Sacramento-San Joaquin valley. This more or less uniform area I designate as the valley kernel. The metaphor is justified when we note the frequency (on the above mentioned maps) with which it is bordered by an equally uniform peripheral area. From the standpoint of kinship systems, this phenomenon justifies the subdivision of the Central California culture area into two subareas, the Central California Valley area and the Central California Mountain area. This subdivision falls nicely in line with a distinction which Dr. Kroeber has frequently made, namely, that the valley dwellers invariably have a richer culture than the mountaineers. It is possible that the kinship systems of the two areas are in some way correlated with their respective wealth and poverty of cultural developments.

For the approximate boundaries of our Valley and Mountain areas let us turn to map 24. This map exemplifies the two areas in as perfect a fashion as is possible with our incomplete data. The Valley area is constituted in large measure of Penutian groups. The three

Maidu groups and three southeasternmost Yokuts groups have been so thoroughly Shoshoneanized that they rightfully belong in the Mountain culture area. Southwestern Pomo, too, I place with the Mountain



of nomenclature is probably due to its marginal position, the peculiar features of the Valley systems having not yet penetrated to it. To return then to the definition of the Valley area. It includes all Penutian groups except the Maidu and three southeastern Yokuts groups, all of the Pomo groups except the Southwestern, and the Yukian Wappo. The Mountain culture area includes the surrounding fringe of Yukian, Athabascan, Hokan, and Shoshonean groups, plus the out-cast Penutian and Pomo groups mentioned above. We shall now proceed to discuss the percentages which show the respective intrarelations of the Valley area and of the Mountain area.

The interrelations of the kinship systems of the Central California Valley area are shown by numbers 31-44, 46, 47, of table 3. The average interrelation of each of these sixteen groups with all of its fifteen fellows is as follows: Tachi 64, Gashowu 65, Chukchansi 62, Southern Miwok 60, Central Miwok 60, Northern Miwok 61, Lake Miwok 61, Southeastern Wintun 58, Southwestern Wintun 58, Central Wintun 58, Northern Wintun 52, Southeastern Pomo 55, Central Pomo 51, Northern Pomo 60, Southern Pomo 52, Wappo 51.

Fifty-eight per cent is the average interrelation between the various groups of the Valley area. The range of percentages is 68 (Southeastern Wintun-Southwestern Wintun 100 to Northern Wintun-Central Pomo 32). The most specialized groups in the area are Wappo and Central Pomo, each with an average of 51. The least specialized group is Gashowu with an average of 65 per cent of its characters shared by all other Valley area groups.

One of the most interesting points appearing in the interrelations of the sixteen Valley area groups is the lack of southern Wintun influence manifested by the Pomo and Wappo groups. The common bases for southern Wintun, on the one hand, and the Pomo and Wappo, on the other, range only from 38 to 49 per cent, which is very low indeed when compared with Luiseño-Northern Diegueño, 76. The probable medium through which Pomo and Wappo were brought into the Valley fold is Lake Miwok and perhaps also Coast Miwok (from which complete data are lacking). The resemblances between Lake Miwok and the five groups in question range from 57 to 76.

The affinities of Wappo and contiguous Southern Pomo are 65 per cent, approaching in some measure the remarkable Luiseño-Northern Diegueño case. With the other three Pomo groups included in the Valley culture area, the relation of Wappo is represented by 57 (Southeastern and Central Pomo) and 59 (Northern Pomo). These

figures are eloquent of the close relations of Yukian Wappo and Hokan Pomo. Both, however, I believe, have been weaned from the original Yukian and Hokan kinship schemes by Penutian example, and, as I have already shown, the Penutian groups which brought about the conversion were undoubtedly Lake and Coast Miwok, and not southern Wintun. The fact of Miwok influence, as against Wintun, is clinched when we examine the relations of the distant Sierra Nevada Miwok to the Pomo and Wappo. The average relations of these groups to the Pomo and Wappo are: to Southeastern Pomo 61, to Central Pomo 54, to Northern Pomo 64, to Southwestern Pomo 55, to Southern Pomo 50, to Wappo 50 per cent.

The position of Northern Pomo is anomalous. Though the farthest removed from the Yokuts groups, it bears a constant relation of 62 per cent to Tachi, Gashowu, and Chukchansi, of the Valley culture area, but of only 49 per cent to the Yauelmani and Yaudanchi, of the Mountain culture area. These figures perhaps emphasize the unity of the Valley area and the potency of diffusion.

Again, the Tachi and Yauelmani both belong to the same dialectic group, yet one has a kinship system distinctly of the Valley type, the other of the Mountain type. Tachi has remained true to the standard of its Valley neighbors, while Yauelmani has yielded to the encroachments of its Yaudanchi and Shoshonean Mountain neighbors. The relation of Yauelmani to Yaudanchi is 89 as against Yauelmani-Tachi 65 per cent. This is but another of the many examples which go to show the inability of language to resist acculturation. It seems more than likely that economic reasons are at the bottom of the Yauelmani association with Yaudanchi in many cultural features, as well as in type of kinship system. Although the dialectic relation of the valley-dwelling Yauelmani is northward with the valley-dwelling Tachi, the economic relation, particularly as relates to food, is to the northeastward with the foothill-dwelling Yaudanchi. For an amplification of their menu the Yauelmani naturally looked, not to the similar valley country in which they themselves dwelt, but to the dissimilar foothill and mountain country.

After this digression, it is high time to return to the Valley area. Since I have discussed the interrelations of the various Yokuts groups, I shall now take up in turn the Miwok, Wintun, and Pomo, and incidentally the interrelations between the four Penutian stocks, Yokuts, Miwok, Wintun, and Maidu, even though the last is beyond the limits of our Valley culture area.

In degree of homogeneity, the four Penutian stocks, considered individually, have but one rival in California, namely, Athabascan, with a homogeneity represented by 73 per cent. The averages for the four Penutian groups are Maidu 77 per cent, Wintun 73 per cent, Yokuts 73 per cent, and Miwok 71 per cent.

Maidu is the most homogeneous stock, with a variation of only 3 per cent (see numbers 14-16, table 3). Its compact area, in which each of its three divisions is in broad contact with the other two, would make this an a priori probability. The kinship systems are, however, so un-Penutian in character that they have been placed in the Mountain group.

Wintun (numbers 38-41, table 3) is the reverse of Maidu, for it is comparatively heterogeneous, the range of variation being 41 per cent. As in the case of Yokuts, the elongate character of its territory makes it prone to the lateral influence of bordering tribes. The Northern Wintun are in actual habitat a hill and mountain people, being on the upper reaches of the Sacramento and its northern affluents. The two southern Wintun groups (average 78 per cent) appear as most typical of the stock, the northern (average 62 per cent) as least. But if the two southern groups are considered as one, the center of gravity shifts to the Central Wintun, where it would appear to belong because of the median position of that people. Together, Wintun and Yokuts occupy the entire length of the great Sacramento-San Joaquin valley, a stretch of territory five hundred miles long.

Miwok, unlike the other three Penutian stocks, does not occupy a single block of territory, but is found in three separate and quite unlike habitats. The bulk of the stock (Plains, Northern, Central, and Southern) is located on the east side of the San Joaquin valley, principally in the foothills and mountains of the Sierra Nevada. A second group (Coast) occupies the Marin peninsula north of San Francisco, and thus possesses a large and favorable stretch of tidal shore line. The third group (Lake) lives in Lake county near the southern end of Clear Lake. It is not cause for surprise, therefore, that Miwok shows less homogeneity than the other three Penutian stocks. It could scarcely be otherwise. The Miwok tribes appear as numbers 34-37 of table 3.

The interrelation (84) of Southern and Northern Miwok is closer than that of any other pair of Miwok groups. This fact is perhaps of historic significance, since the two groups in question are separated by the Central Miwok, with whom their relations are the same (76).

Northern Miwok appears as the most typical group (76), Lake Miwok as the least typical (63). Southern and Central Miwok average 75 and 70 per cent respectively.

Now, if we consider Penutian as a whole, we will find that the high degree of homogeneity apparent in its respective stocks is lacking, and that the index for the entire family falls to 58 per cent. This is undoubtedly due to the Hokanization and Shoshoneanization of the Maidu, certain Yokuts groups, and the Northern Wintun. The interrelations of the Penutian groups may be observed in table 3 by examining numbers 14-16, 29-41. Gashowu (67 per cent) is most typical of the family, Northeastern Maidu (51 per cent) the least typical.

The average interrelation of each of the other Penutian groups with all of its congeners is as follows: Northwestern Maidu 54, Southern Maidu 55, Yauelmani 57, Yaudanchi 58, Tachi 65, Chukchansi 61, Southern Miwok 55, Central Miwok 57, Northern Miwok 58, Lake Miwok 55, Southeastern Wintun 61, Southwestern Wintun 61, Central Wintun 59, Northern Wintun 55.

If we excise the aberrant groups (Maidu, Yauelmani, Yaudanchi, and Northern Wintun), we have ten typical Penutian groups remaining, with an average degree of similarity ranging from 61 (Lake Miwok) to 71 (Gashowu), and with the mean of these averages 66. The most typical group, as with the Penutian family as a whole, is Gashowu. The least typical group is Lake Miwok, undoubtedly because it has suffered modification at the hands of its Pomo and Wappo neighbors, as well as modified them. The average interrelation of each of the remaining eight groups with all of its nine fellows is: Tachi 68, Chukchansi 69, Southern Miwok 64, Central Miwok 64, Northern Miwok 64, Southeastern Wintun 67, Southwestern Wintun 67, Central Wintun 62.

It is perfectly apparent that the center of gravity of the Penutian kinship systems is not at either end of the vast valley which the tribes inhabit, but in the medial portion. Our average percentages make it appear that the most typical Penutian terminology is found among the northern Yokuts and southern Wintun rather than with the Miwok, in other words, with the two stocks that held the great valley.

The one remaining Valley-area linguistic stock of considerable size, from which we have data, is Pomo (see numbers 42-46 of table 3). Its index of homogeneity is 60 per cent, far below that of any one of the four Penutian stocks. Its most specialized member is Central Pomo, with an average interrelation of 57, its most generalized is Northern



Pomo, with an average of 65. When one remembers that the Pomo are a geographically compact stock like the Maidu, this low percentage appears the more unusual. Yukian has a similarly low index (61 per cent), but this is readily accounted for by the isolation of Wappo. The one other Hokan stock from which we have comparable data is Yuman, which has an index of 66 per cent. Yuman, like Pomo, holds an unbroken area; but Yuman has the desert as a physical barrier between its eastern and western regions. Pomo has no such barrier to intercourse. Yet aside from the far-flung Shoshonean stock it is the least homogeneous in California. Yuman we found to have been Shoshoneanized in large measure. But what of Pomo?

In a considerable degree we are justified, as I have pointed out, in declaring that Pomo is being Penutianized through the adjacent Miwok groups. But I think that more than this is happening to Pomo. It is in a nascent state, so to speak—a state of flux, perhaps superinduced, to be sure, by the assimilation of Penutian ideas. A number of facts seem to warrant the above statement.

Among some Pomo groups the term for father is applied to son, that for mother to daughter. In one group, Southeastern Pomo, the terms are used only jokingly, in other groups they are not used at all. The Eastern Pomo north of Clear lake do not differentiate father's brothers as to age, those south of Clear lake do. In those Pomo groups which do differentiate father's older brother from father's younger brother a grandparent term is used for the former, apparently indicating that the practice is a comparatively recent innovation, perhaps due to Wappo example. Then, too, with the Central Pomo there is occasional self-reciprocity of terms in the grandparent class, the four grandparent terms being applied to the grandchildren in place of the normal Pomo grandchild terms. Were the Central Pomo adjacent to Shoshonean groups I should say in this instance that it was surely a manifestation of Shoshonean influence. All of the Pomo groups except Southwestern Pomo designate cross-cousins by uncle-aunt and nephew-niece terms. Although this is the general practice, I nevertheless encountered one Northern Pomo informant from the head of Ten-mile river, in Mendocino county, who insisted that in her locality sibling terms were employed for cross-cousins as for parallel cousins. The Southwestern Pomo are the only ones who employ sibling terms consistently for cross-cousins, but their manner of applying them is quite different from the usual central Californian method, the relative age of the connecting parents being the criterion as to the sibling term

used rather than the relative age of the cousins concerned. The above facts seem to me, as I have already stated, to warrant the conclusion that the Pomo systems are in a more or less nascent state.

Owing to its aberrant character, I place Southwestern Pomo in the Central California Mountain culture area instead of in the Valley culture area. Of the various Pomo groups, Southwestern Pomo seems to be most closely allied with Southern Pomo, with which it has 70 per cent of its characters in common. Its next nearest relative is Northern Pomo, with which it has 65 per cent of its characters in common. On the other hand, it also has 65 per cent of its characters in common with far-away Kawaiisu and the still more remote Northern Diegueño. It has 62 per cent of its characters in common with Eastern Mono and Southern Diegueño, all of which justifies its exclusion from the Central California Valley culture area and its inclusion with the Mountain culture area. We have already emphasized the fact that the Pomo groups have been subjected to a strong Penutian influence, principally through the channels of Lake and Coast Miwok. Such being the case, one would naturally expect that the more remote Pomo groups would be the ones least influenced by the Miwok ideas. Such, I think, is the explanation of the Southwestern Pomo anomaly. They are, so to speak, backwoodsmen, inhabiting a mountainous region fronting upon a precipitous and uninviting stretch of coast without sheltered bays. Apparently the full force of Penutian influence simply has not penetrated to them. Their kinship system may perhaps therefore be considered as nearest the original Pomo type. This original Pomo type was undoubtedly much more generalized than the present Pomo system; hence, perhaps, the high degree of resemblance of Southwestern Pomo to such remote groups as the Kawaiisu and Northern Diegueño. The type of kinship system employed by Southwestern Pomo is distinctly of the peripheral Mountain culture area type, and, as I have just implied, this may well approach the original Pomo type, and what is still more interesting, the original Hokan type. Certainly the original Hokan type must have been far removed from the typical Penutian system. Of all of the Hokan groups, exclusive of its Pomo congeners, Southwestern Pomo most resembles the Yuman groups and the Achomawi. It has 65 per cent of its characters in common with Northern Diegueño, 62 per cent with Southern Diegueño, 64 per cent with Kamia, and 43 per cent with Achomawi. With Yuma and Shasta, it has 41 per cent in common, with Karok, only 38 per cent.

The interrelations of the various Hokan groups may be observed by examining numbers 10-12, 25-28, and 42-46, of table 3. The averages, which do not exceed 56, and the index for the family, which is 48, are not very eloquent arguments for linguistic relationship when compared with the Penutian maximum of 67 and index of 58. But, on the other hand, the peripheral, disconnected distribution of the Hokan groups is an effectual barrier to homogeneity of kinship systems. In any event, the lack of homogeneity is no argument against the putative common linguistic origin of the Hokan groups.

The following are the average interrelations of each Hokan group with all of its fellows: Karok 39, Shasta 45, Achomawi 47, Yuma 40, Kamia 51, Southern Diegueño 52, Northern Diegueño 57, Southeastern Pomo 48, Central Pomo 43, Northern Pomo 51, Southwestern Pomo 53, Southern Pomo 50.

We are ready to examine the twenty groups which compose the Central California Mountain culture area. The index for this area is 57 per cent. The range of variation is 57 per cent; 92 is the maximum per cent in the interrelations of several Athabascan groups, and 35 the minimum in the relation of Tübatulabal to Lassik. The range of the averages for the twenty groups is fourteen (49 to 63). Northwestern Maidu is the most typical group, Coast Yuki the least typical. Table 3 exhibits the interrelations of the twenty tribes (see numbers 4-7, 11-20, 29, 30, 45, 48-50). The averages of the interrelations of each of these twenty tribes follows: Southwestern Pomo 50, Coast Yuki 49, Huehnom 55, Yuki 56, Kato 59, Sinkyone 61, Wailaki 60, Lassik 59, Shasta 58, Lutuami 53, Achomawi 56, Northeastern Maidu 59, Northwestern Maidu 63, Southern Maidu 62, Eastern Mono 57, Western Mono 60, Tübatulabal 50, Kawaiisu 53, Yaudanchi 56, Yauelmani 57.

Six groups in the northeastern part of the state exhibit a high degree of affinity. These groups are Shasta, Lutuami, Achomawi, Northeastern Maidu, Northwestern Maidu, and Southern Maidu. They show an average interrelation of 67 per cent and a range of 25 per cent (Lutuami-Northeastern Maidu 54, Northwestern Maidu-Southern Maidu 79). The average interrelationship for each group is high, ranging from 63 to 70, as the following list shows: Shasta 69, Lutuami 63, Achomawi 65, Northeastern Maidu 67, Northwestern Maidu 70, Southern Maidu 70.

The significance of these figures as regards the cause of the Maidu defection from the Penutian ranks is apparent. It seems clear that

the defection is due to Shastan (Shasta-Achomawi) influence. If we had the data in hand, we should probably find that Atsugewi and Yana also played a large part. Shasta and Maidu are not in contact, yet they exhibit more resemblances than do the Maidu and the nearer Achomawi. I have an idea that the Shasta-Maidu phenomenon is a case of convergence and is the result of Northern Wintun (Penutian) influence on Shasta (Hokan) and of Hokan (probably not Shasta) influence upon Maidu (Penutian). In other words, it looks like a case of convergence similar to one which I shall shortly present.

It seems unlikely that the Shoshonean neighbors of the Maidu had as much influence over them as their Hokan neighbors. Although we have not sufficient Northern Paiute data, the Eastern Mono data will serve as a substitute. We find a decided falling off as compared to the Shasta relations of Maidu. The relations to Eastern Mono are as follows: Northeastern Maidu 57, Northwestern Maidu 59, Southern Maidu 62. The relation between Eastern Mono and Southern Maidu is the same as between Southern Maidu and the distant Achomawi and Lutuami. Southern Maidu and Shasta, however, have 70 per cent of their traits in common, in view of which it would seem that Maidu has suffered more modification at the hands of its Hokan neighbors (not to forget Washo) than at the hands of its Shoshonean neighbors.

Although certain kinship systems seem to offer greater resistance to outside influences than others, it is undoubtedly true that, where resemblances do appear between systems of two different languages, there has been a mutual, but not necessarily equal, interaction of one upon the other. For instance, one cannot altogether believe that Luiseño has profoundly modified Northern Diegueño without being modified to some extent itself.

Shoshonean systems seem to be of an unusually dynamic nature, for where they touch a foreign group they leave an impress. Witness the Yuman, southeastern Yokuts, and Maidu cases. The Sierra Nevada Miwok have also been influenced, as shown by the fact that they have over 50 per cent of their characters in common with the two adjacent Mono groups. The Western Mono influence on Yokuts has been even greater, for the percentages range over 60. The result, however, is not altogether onesided. In other cultural features Western Mono has been markedly affected by its Penutian neighbors and so in some measure has its kinship system. This fact with regard to the kinship system becomes obvious if we examine the percentages which obtain between Western Mono and its closely related eastern

congener, on the one hand, and the Yokuts tribes, on the other: Yauelmani, with Western Mono 62, with Eastern Mono 59; Yaudanchi, with Western Mono 65, with Eastern Mono 62; Tachi, with Western Mono 62, with Eastern Mono 59; Gashowu, with Western Mono 68, with Eastern Mono 62; Chukchansi, with Western Mono 62, with Eastern Mono 51.

Strangely enough, Kawaiisu and Tübatulabal, both Shoshonean groups in contact with the Yokuts, seem not to have exercised so much influence as the Mono groups. This is to be expected of the Kawaiisu, who may be recent comers. The Tübatulabal, who are doubtless old residents, have clearly exerted some influence, although not so much as the Mono, upon the Yaudanchi and Yauelmani. The mutual interaction of Tübatulabal and Yaudanchi has resulted, however, in weaning the former from the Shoshonean, and the latter from the Yokuts, standard. The detailed relations follow: Yauelmani, with Kawaiisu 49, with Tübatulabal 54; Yaudanchi, with Kawaiisu 49, with Tübatulabal 59; Tachi, with Kawaiisu 46, with Tübatulabal 43; Gashowu, with Kawaiisu 43, with Tübatulabal 41; Chukchansi, with Kawaiisu 41, with Tübatulabal 41.

It seems curious that Mono influence is not so manifest in the Sierra Nevada Miwok systems as in the Yokuts systems. What is more, Miwok has been in slightly closer relation with Eastern than with Western Mono, as the following figures show: Southern Miwok, with Eastern Mono 54, with Western Mono 51; Central Miwok, with Eastern Mono 54, with Western Mono 54; Northern Miwok, with Eastern Mono 57, with Western Mono 51. This is to be expected in the case of Northern Miwok, but hardly in the case of Southern Miwok. In pre-American days the Central Miwok and Eastern Mono were at times hostile, a condition which perhaps obtained between the other Miwok groups and the Mono. The Western Mono and their Chukchansi (Yokuts) neighbors, at least, were friendly. It is questionable, however, if the percentages for kinship relationship are a reflection of hostility on the one hand and friendliness on the other, unless such conditions are of many centuries' standing.

Although, as we have already noted, the degrees of relation obtaining between the three Maidu groups and Eastern Mono are not high (Northern Maidu 57, Northwestern Maidu 59, Southern Maidu 62), those obtaining between the Maidu groups and Western Mono show a surprising increase over those for Eastern Mono. They are: Northeastern Maidu 68, Northwestern Maidu 70, and Southern Maidu

73. Furthermore, the percentages of resemblances of Western Mono to Shasta (70) and Achomawi (65) are astoundingly high. I think the explanation of these resemblances is convergence. In the case of Western Mono, we have a Shoshonean base altered by Penutian influence; in the case of Maidu, a Penutian base altered by Hokan and Shoshonean influence; in the case of Shasta-Achomawi, a Hokan base altered by Penutian and Shoshonean influences. This hypothesis is strengthened by a review of the resemblances: Maidu (average) and Shasta 71, Maidu (average) and Achomawi 61, Maidu (average) and Western Mono 70, Western Mono and Shasta 70, Western Mono and Achomawi 65. Perhaps, for the same reason, Northern Wintun and Southern Maidu have 65 per cent in common. Both are Penutian groups subjected to Hokan influence, Shasta-Achomawi in the first and Washo and Shasta-Achomawi in the second.

Another interesting stock, because of its small extent, is Yukian, the intrarelations of which may be seen in numbers 47-50, table 3.

The average degree of resemblance within the stock is 61 per cent. This comparative lack of homogeneity is the result of the Penutianizing of the isolated Wappo, which has been already discussed in connection with the Central California Valley culture area, to which it belongs. Coast Yuki is also somewhat divergent (58), but the cause of its divergence is not apparent, and in lieu of a better explanation it must be simply laid to either conservatism or a specializing tendency. In some measure Coast Yuki has the aspect of an abraded system which has lost many of the typical features prominent in other Yukian languages, for example, the multiplicity of the uncle-aunt terms. Closely related (86) Huchnom and Yuki average respectively 67 and 66 per cent of features in common with the other Yukian groups. Aside from Wappo resemblances to Southwestern and Southern Pomo, most of the relations of the Yukian groups with non-Yukian groups are apparently normal. Some cases which call for comment are the interrelations of the four Yukian groups (47-50, table 3) with Northwestern Maidu (14 of table 3), and with Hupa, Whilkut, Lassik, Sinkyone, Wailaki, and Kato (1, 2, 4-7, of table 3).

It is very plain that Yuki has been materially affected by its Athabascan neighbors, especially Wailaki and Sinkyone, with each of which it has 65 per cent of its characters in common. Huchnom has also felt the Athabascan current, but in less degree. Coast Yuki has been still less affected, and Wappo scarcely shows the result of the contact, if at all. The comparatively high degree of resemblance

(62 per cent) between Yuki and Northwestern Maidu is difficult to explain, except on the basis of both being neighbors of the Central Wintun, but the actual resemblances to Central Wintun are not striking. Yuki is related to it by 49 per cent, Northwestern Maidu by 51.

This concludes the survey of the Central California Mountain culture area. We have found that this area lacks the uniformity of the Valley culture area, apparently because of its peripheral character and the diverse linguistic stocks of which it is composed.

It now remains to consider the intrarelations of the Californian Athabascan and Shoshonean systems.

The high degree of homogeneity of the Californian Athabascan groups is indicated by the net average of 73 per cent for the interrelations of the various groups. Tolowa, geographically separate, is the most divergent and bears an average relation to the other groups of 62 per cent. The centrally located Sinkyone, on the other hand, are the most representative, with an average of 78 per cent. The averages for the other tribes are: Hupa 71, Whilkut 73, Lassik 77, Wailaki 76, and Kato 75. The range of variation within the family is 43 (Tolowa-Kato 54, Hupa-Whilkut 97). The detailed interrelations are to be seen in numbers 1 to 7 of table 3.

The closest Californian relatives of the divergent Tolowa are Hupa and Whilkut, which, however, themselves diverge in some measure from the southern tribes. Actually there are three subtypes of Athabascan kinship systems in California. Tolowa embraces one, Hupa and Whilkut the second, and the four southern Athabascan groups the third. Hupa and Whilkut have 97 per cent of their characters in common, the four southern groups an average of 91 per cent in common. The numerical preponderance of southern groups is responsible for the location of the Athabascan center of gravity (highest average) with the Sinkyone. I by no means infer that Sinkyone is the nearest to the original Athabascan type. I merely give its relation as demonstrated by the data in hand. The possession of Mattole, Chilula, and Nongatl data might materially shift the center of gravity.

In part we have already discussed the interrelations of Athabascan and non-Athabascan groups, notably Yukian and those of the Northwestern California culture area. A few others deserve comment. Northern Pomo has from 59 to 65 per cent of its characters in common with the southern Athabascans, undoubtedly as the result of proximity. The real source of the southern Athabascan divergence, I think, is Penutian influence operating directly through Central and Northern

Wintun and indirectly through the Northern Pomo, but apparently not to any extent through Yukian groups, with which the Wintun have less than 50 per cent in common. The resemblances to Central and Northern Wintun follow: Lassik to Central Wintun, 62, to Northern Wintun 57; Sinkyone to Central and Northern Wintun 59; Wailaki to Central Wintun 62, to Northern Wintun 59; Kato to Central and Northern Wintun 57.

The resemblances of the four southern Athabascan systems to a number of remote Central Californian groups are not explainable on the basis of direct diffusion, but seem to me to be examples of convergence resulting from the interaction of kinship systems of the Valley culture area and of the Mountain culture area. The details of these interrelations may be studied by observing in table 3 the percentage of common ground held by the four southern Athabascan systems, on the one hand, and by Gashowu, Tachi, Yaudanchi, Yauelmani, Western Mono, Southern Maidu, Northeastern Maidu, and Northwestern Maidu, on the other hand. Averaging the interrelations of the four Athabascan groups with each of these foreign groups, the following interrelationships appear: with Gashowu 57, Tachi 57, Yaudanchi 52, Yauelmani 55, Western Mono 56, Southern Maidu 65, Northeastern Maidu 64, Northwestern Maidu 66. Similar interactions we have already discussed in the cases of Maidu, Shasta, Western Mono, and Yokuts. That the action of Hokan and Shoshonean on Penutian Maidu and of Penutian upon Athabascan should bring about a marked resemblance between Maidu and Athabascan is possibly due to a remote and fairly uniform Penutian basis.

Map 25 summarizes in rough fashion, by means of arrows, the directions in which kinship modifications have traveled. Double arrows indicate the readily discernible cases of mutual reaction between pairs of tribes.

In table 3 eight Californian Shoshonean systems are represented. The variation is 54 (Eastern Mono-Cupeño 38, Cupeño-Cahuilla 92). The average interrelation is 59 per cent, exhibiting a heterogeneity exceeded only by the linguistically diversified, and hardly comparable, Penutian and Hokan families. The eight Shoshonean groups belong to three of the four major divisions of the Shoshonean stock. First, we have the monotypic Tübatulabal, who are the most divergent of the eight, having an average resemblance to the others of 52 per cent. Second are the Plateau Shoshoneans, represented by Eastern Mono, Western Mono, and Kawaiisu, with an average interrelation of 67



per cent. Third are four Southern California Shoshonean groups, with a high degree of homogeneity represented by 86 per cent. In spite of such very typical, all-pervading traits as self-reciprocity in the grandparent class, Shoshonean is far from uniform, as our data



Map 25.—The diffusion of kinship traits.

clearly show. The detailed interrelations of the eight groups are presented in numbers 17–24, table 3. In relation to its seven congeners, each of the Californian Shoshonean kinship systems bears the following average interrelation: Eastern Mono 53, Western Mono 53, Kawaiisu 59, Tübatulabal 52, Serrano 64, Desert Cahuilla 63, Cupeño 62, Luiseño 64. Serrano and Luiseño appear as the most generalized tribes.

The relative homogeneity of the Californian representatives of six of the seven linguistic families (monotypic Lutuami is excluded) found within the state is shown by the percentages listed below. The degree of heterogeneity corresponds in a measure with the linguistic differentiation within the family, that is the greater the linguistic differentiation, the greater the heterogeneity of kinship systems, as the lately recognized Penutian and Hokan families show. Then, too, there appears to be a correlation between geographic range and homogeneity or heterogeneity. These generalizations are based on Californian data only: Athabascan 73, Algonkin 65, Yukian 61, Shoshonean 59, Penutian 58, Hokan 48.

As stated above, the variation in type of kinship system is usually in direct ratio with the linguistic differentiation of the stock or family concerned. Utterly irrespective of this principle, and often totally at variance with it, is the result of cultural contact. But the exact result of cultural contact upon a kinship system cannot be predicted, for it would appear that below it and controlling it are subtle conditions and forces which sometimes lie inert or again manifest themselves in marked fashion. Compare, for example, Wiyot and Luiseño: on the one hand, an inert system which neither influenced nor was influenced, except by its linguistic relative Yurok; on the other hand, a highly dynamic, virile system which swamps its neighbors in spite of the barrier of language. The fact that one group may have been hostile to its neighbors, the other friendly, by no means solves the problem. Back of it all there seems to be a psychic background. Some linguistic groups are particularly plastic, yielding to the least foreign pressure, but often giving as well as taking. Others seem the reverse and appear to offer stout resistance to encroachment.

#### ETYMOLOGY OF KINSHIP TERMS

In this section an attempt is made to isolate the principal kinship stems in the several linguistic families of California; also to present those stems which are the common property of most of the members of each family, and which, therefore, may be regarded as the nucleus about which each system is built. The presentation is far from exhaustive. In fact, an exhaustive presentation would be possible only with a thorough knowledge of each native language. I have to thank Drs. Kroeber and Radin for suggestions and for examination of my grouping of terms.

I am presenting the Yukian, Athabasean, and Shoshonean materials first, then the more differentiated Penutian and Hokan materials. Lastly, I call attention to the similarity of certain stems in the various, major linguistic groups.

The Wiyot and Yurok materials have been exhaustively considered in relation to other Algonkin kinship systems by Dr. Sapir.<sup>64</sup>

The grouping of terms which follows indicates what I believe to be their affinities. At the end of each group I have placed the hypothetical archaic radical from which the terms in the group may have sprung.

The numbers 1 to 9 indicate the chief groups of relatives in which each term is employed. The indication of the use of the hypothetical archaic radical is seldom more than a guess. I have proceeded on the principle that terms for lineal relatives are more archaic than those for collateral relatives. The following key list makes clear the significance of the nine numbers employed: 1 parent term, 2 child term, 3 grandparent term, 4 grandchild term, 5 sibling term, 6 uncle-aunt term, 7 nephew-niece term, 8 parent-in-law or child-in-law term, 9 sibling-in-law term.

### *Yukian*

The twenty-five stems common to two or more Yukian groups are presented herewith.

1. Huchnom te' 3; Coast Yuki te 1; Archaic te 3.
2. Wappo ta'a 6; Huchnom tahai 9, tawice 9; Yuki ta'eit 9; Coast Yuki taha 9; Archaic ta 6.
3. Wappo aiya 1; Yuki ai't 6, kai't 6; Archaic ai 6.
4. Huchnom ku 1; Yuki k'un 1; Archaic ku 1.
5. Huchnom ka 1; Yuki k'an 1, ka'e 6; Coast Yuki kaha' 6; Archaic ka 1.
6. Wappo na'a 1, newa 6; Huchnom na'k 6, nake 9; Yuki nai't 6; Coast Yuki naiste 2, nete 6, natein 6, nane 6; Archaic n8 1.
7. Huchnom kilka 2; Yuki k'ili 2; Archaic kil 2.
8. Wappo bapa 3; Huchnom pauñ 3, pe' 3; Yuki pop 3; Coast Yuki pep 3; Archaic p8p 3.
9. Wappo oca 3; Huchnom os 3; Yuki oc 3; Coast Yuki os 3; Archaic os 3.
10. Huchnom asuntée 4, ahumtee 4; Yuki asamapka<sup>a</sup> 4, asamtea<sup>a</sup>ka<sup>a</sup> 4; Coast Yuli asmam 4, asintee 7; Archaic asam 4.
11. Wappo etsa 5; Huchnom mutea 5, ica 5; Yuki k'ite 5; Coast Yuki mute 5; Archaic 8te 5.
12. Wappo atsa 7; Yuki tea'tka<sup>a</sup> 7, teat 9; Coast Yuki emsait 7; Archaic te8 7.
13. Yuki la'n 5, la'ya<sup>a</sup> 9; Coast Yuki elec 5, eleye 9; Archaic le 5.
14. Wappo yau 5, yapi 5; Huchnom yauk 6; Archaic yau 5.
15. Huchnom ke 5, keka 6, kika 6; Yuki kika 6; Coast Yuki ke 5; Archaic k8 5.
16. Wappo olo 6; Huchnom olaiyak 9; Yuki o'lam 8; Coast Yuki olawisteka 8; Archaic ola 8.

<sup>64</sup> The Algonkin Affinity of Yurok and Wiyot Kinship Terms, unpublished manuscript.

17. Wappo bo'a 6, potea 8; Huchnom poiym 6; Yuki p'oyam 6; Archaic po 6.
18. Wappo paha 6; Huchnom patcut 6; Yuki pa'teet 6; Archaic pa 6.
19. Huchnom omsa 7; Yuki omsaka<sup>n</sup> 7; Archaic omsa 7.
20. Yuki pimiteka<sup>n</sup> 7; Coast Yuki pim 7; Archaic pim 7.
21. Huchnom hupume 7; Yuki kup 7; Archaic xup 7.
22. Yuki witi 8; Coast Yuki weteme 7, üwis 8; Archaic w8t 7.
23. Huchnom musp 8; Yuki musp 8; Coast Yuki mus 8; Archaic mus 8.
24. Wappo emili 8; Huchnom owel 8; Yuki owil 8; Archaic ow8l 8.
25. Huchnom sitem 8; Yuki sutam 8; Archaic sut 8.

Some interesting resemblances appear in the Yukian material. To begin with, the similarity of *te* in group 1 and of *ta* in group 2 suggests the possibility of a common origin. The same remark applies to *os* and *asam* of groups 9 and 10, and seems even quite probable in this instance: *os* is a grandparent term, *asam* a grandchild term. The prevalence of a single stem for these relations in other languages (Shoshonean, for example) strengthens the probability of this hypothetical Yukian case. The possibility of the terms in groups 11 and 12 having a common origin should not be overlooked, in spite of their rather diverse meanings.

Group 13 presents two interesting instances of sibling-in-law terms apparently based on sibling terms, and hence bearing a resemblance to our English terminology. The stems *po* and *pa* (groups 17 and 18), largely employed for fathers' older and younger sisters, may well be modifications of a single stem to indicate relative age. The stem *pa* also occurs very commonly in Shoshonean languages as the designation of father's sister. I shall bring together all such resemblances between the major linguistic groups in a table at the end of this chapter.

It seems possible to isolate eleven radicals, found in at least three out of four of the Yukian languages, that may have formed part of an archaic Yukian kinship system. These radicals, with possible meanings, are as follows:

- n8. Mother.
- os. Father's father.
- p8p. Father's mother.
- asam. Grandchild.
- 8tc. Sibling.
- po. Father's older sister.
- pa. Father's younger sister.
- ta. Mother's brother.
- tc8. Nephew-niece.
- mus. Female relative-in-law of generation above or below speaker. "Woman."
- ola. Male relative-in-law.

The system indicated by the above fragment is distinctive chiefly for the presence of two terms for father's sisters.

*Athabascan*

The various Athabascan kinship terms examined in the following lists of stems show relatively less differentiation than do the Yukian terms. The apparent homogeneity of Athabascan kinship systems may be due to resistant and conservative qualities in Athabascan speech, or again may be due to the fact that geographic separation of the Athabascan peoples has taken place only comparatively recently. Which hypothetical factor is responsible, or whether both, or neither, is not evident in the kinship data.

The extra-Californian Athabascan terms presented in the following lists are drawn from four groups: Chipewyan<sup>65</sup> and Beaver,<sup>66</sup> representing the northern Athabascans, Navaho<sup>67</sup> and Jicarilla Apache,<sup>68</sup> the southern Athabascans.

1. Tolowa ta 1, tayi 6; Hupa ta 1, tai 6; Whilkut ta 1, tai 6; Lassik ta 1; Sinkyone ta 1; Wailaki ta 1; Kato ta 1, tai 6; Chipewyan ta 1; Beaver ta<sup>6</sup> 1, te'a' 1, ti'a' 1; Navaho dā'i 6, dā'' 7; Archaic ta 1.
2. Mattole xa 1; Navaho qa 1; Jicarilla kae 1; Archaic ka 1.
3. Hupa ine 1; Whilkut ine 1; Lassik ne 1; Sinkyone ne 1; Wailaki mûn 1; Kato nan 1; Beaver na 1, nai 1; Jicarilla ni 1; Archaic n8 1.
4. Beaver ma 1; Navaho ma 1; Archaic ma 1.
5. Hupa antewiñ 1; Whilkut antewiñ 1; Mattole ûntewin 1, ûnteciñ 1; Chipewyan an 1; Archaic an 1.
6. Hupa xai 2; Whilkut xai 2; Lassik ai 2; Sinkyone ai 2; Archaic ai 2.
7. Tolowa sie 2; Hupa tse 2; Whilkut tse 2; Mattole tsi 2; Chipewyan lie 2; Beaver tûe 2; Navaho tsî'' 2; Archaic s8 2.
8. Tolowa yaset 8; Lassik yas 2, yasat 8; Sinkyone yac 2, yasak 8; Wailaki yac 2, yacat 8; Kato yac 2, yacat 8; Chipewyan yeze 2; Navaho yā'zh 2; Jicarilla jaje 2; Archaic yac 2.
9. Tolowa yatce 2; Hupa yatce 2; Whilkut yatce 2; Mattole ciatete<sup>6</sup> 2; Lassik yatce 2; Sinkyone yatce 2; Wailaki yatce 2; Kato yateete 2; Chipewyan yaze 2; Archaic yatce 2.
10. Lassik yat 8; Wailaki yat 8; Kato yat 8; Navaho zhā''ā'd 8; Archaic yat 8.
11. Tolowa ye 6; Mattole bi<sup>6</sup> 2; Beaver ze 6, se 6; Navaho yě'' 2, yě'' 8; Archaic ye 2.
12. Wailaki et 2; Kato ite 2; Archaic 8te 2.
13. Lassik al 3; Wailaki al 3; Navaho ā'li 3; Archaic al 3.
14. Tolowa ame' 3; Hupa maatewuñ 3; Whilkut maatewuñ 3; Archaic m8 3.
15. Kato teau 3; Beaver tea<sup>6</sup> 3, tce<sup>6</sup> 3, ea 3.

<sup>65</sup> Pliny Earle Goddard, *Analysis of Cold Lake Dialect, Chipewyan*, Am. Mus. Nat. Hist., Anthr. Papers, x, 105, 1912.

<sup>66</sup> Pliny Earle Goddard, *Beaver Dialect*, Am. Mus. Nat. Hist., Anthr. Papers, x, 414, 1917.

<sup>67</sup> The Franciscan Fathers, *An Ethnologic Dictionary of the Navaho Language* (Saint Michaels, Arizona, The Franciscan Fathers, 1910), 434.

<sup>68</sup> Pliny Earle Goddard, *Analysis of Cold Lake Dialect, Chipewyan*, Am. Mus. Nat. Hist., Anthr. Papers, x, 105, 1912.

16. Tolowa trene 3; Hupa tein 3; Lassik teñ 3; Sinkyone teañ 3; Wailaki teñ 3; Kato teñ 3; Archaic te8n 3.
17. Tolowa sagi 3; Hupa tchuwe 3; Whilkut tchuwe 3; Lassik teugi 3; Sinkyone teigi 3; Wailaki teigi 3; Kato te'gi 3; Chipewyan tsiye 3; Archaic teigi 3.
18. Tolowa su 3; Whilkut tewo 3; Mattole hwo 3; Lassik teo 3; Sinkyone teo 3; Wailaki teo 3; Kato teo 3; Chipewyan tsōne 3, tsū<sup>e</sup> 8; Beaver teua 3, teū a 2, teōn 8; Navaho teo 3; Jicarilla teō 3; Archaic teo 3.
19. Tolowa yanit 4; Hupa yal 4; Whilkut yal 4; Lassik yal 4; Sinkyone yal 4, yanit 7; Wailaki yal 4; Kato yal 4; Archaic yal 4.
20. Hupa tsoi 4; Whilkut tsoi 4; Lassik tsoi 4; Sinkyone tsoi 4; Wailaki tsoi 4; Kato tsoi 4; Chipewyan tθōye 4; Navaho tsōi' 4; Jicarilla tsūyen 4; Archaic tsoi 4.
21. Tolowa tcayi 4; Hupa kyai 4; Whilkut kyai 4; Lassik teai 4; Sinkyone teai 4; Wailaki teai 4; Kato teai 4; Beaver cai 4; Navaho tcai 3; Archaic tcai 4.
22. Tolowa onigi 5; Hupa uñute 5; Whilkut uñute 5; Lassik on 5; Sinkyone onnaga 5; Wailaki onuñ 5; Kato onuñ 5; Chipewyan onage 5; Beaver xwōnne 5; Navaho i'nai 5; Jicarilla ina<sup>a</sup> 5; Archaic 8n 5.
23. Tolowa ati 5; Hupa at 5, aditewu 6; Whilkut at 5, aditewu 6; Lassik at 5; Sinkyone ade 5; Wailaki at 5; Kato at 5; Navaho ā'di 5; Archaic at 5.
24. Tolowa tce'le 5; Hupa kil 5; Whilkut kil 5; Lassik teel 5; Sinkyone teal 5; Wailaki teil' 5; Kato teele 5; Chipewyan teele 5; Beaver teille 5; Navaho tsī'li 5; Archaic te8l 5.
25. Tolowa teci 5; Hupa dete 5; Whilkut dete 5; Lassik de 5; Sinkyone de 5; Wailaki te 5; Kato t'eci 5; Beaver dete 5; Navaho dē'zhe 5; Archaic de 5.
26. Hupa is 6; Whilkut is 6; Lassik tisnet 6; Sinkyone tisnet 6; Wailaki tisnet 6; Archaic is 6.
27. Lassik suk 6; Sinkyone sūk 6; Archaic suk 6.
28. Tolowa onkai 6; Hupa unkai 6; Whilkut unkai 6; Lassik unkai 6; Sinkyone unkai 6; Wailaki iñkai 6; Kato unkai 6; Navaho ak'a'i 6; Archaic kai 6.
29. Tolowa la'e 5, lasen 9; Hupa latse 9; Whilkut latse 9; Lassik la 7, laseke 7; Sinkyone la 7, lasuñ 9; Wailaki la 7; Kato la 7, lastee 7; Beaver lace<sup>e</sup> 9; Navaho lā' 5; Archaic la 7.
30. Tolowa aci 7, actre 7, asti 9; Hupa actee 7; Whilkut actee 7; Mattole ac 7; Lassik as 7, aseke 7; Sinkyone as 7, aseke 7; Wailaki as 7; Kato ac 7, asce 7; Archaic as 7.
31. Tolowa metri 8; Hupa metce 8; Whilkut metce 8; Lassik betce 8; Sinkyone betce 8; Wailaki betci 8; Kato betsi 8; Beaver be<sup>e</sup> 8; Archaic be 8.
32. Tolowa somtei 8; Hupa wuntce 8; Whilkut wuntce 8; Mattole gante 8; Lassik suntce 8; Sinkyone santce 8; Wailaki tante 8; Kato cantce 8; Beaver tce<sup>e</sup> 8; Archaic c8ntce 8.
33. Tolowa gunta 8; Hupa wundan 8; Whilkut wundan 8; Mattole gandan 8; Lassik gandani 8; Sinkyone gandane 8; Wailaki gandani 8; Kato gundan 8; Navaho ādan' 8; Archaic gandan 8.
34. Tolowa ge 9, getre 9, gi 9; Hupa we 9, wetce 9; Whilkut we 9, wetce 9; Mattole g<sup>e</sup> 9, g<sup>e</sup>din 9; Lassik ge 9, geduñ 9, geseke 9; Sinkyone ge 9, geduñ 9, getceke 9; Wailaki ge 9, geduñ 9, getceek 9; Kato ge 9, geduñ 9, getceek 9; Beaver ge<sup>e</sup> 9; Archaic ge 9.

The preceding materials exhibit a number of interesting points. Like Wappo, some Athabascan languages employ what appears to be a feminine suffix. This is the ending -seke or -teeke of groups 29, 30,

and 34. Dr. Goddard writes me concerning this ending in Lassik: "The ending 'seke' in 'geseke' and 'laseke' may possibly indicate sex. I should feel rather certain of it if it could be connected phonetically with 'tee ke,' the ordinary form for woman." However, the Wappo and Athabascan feminine suffixes are not altogether comparable. The former is simply a grammatical ending, while the latter is perhaps the word for woman.

If a stem occurs in two of the three chief Athabascan groups, that is, northern, southern, and Californian, I consider that there is a strong presumption in favor of its being a term of the archaic, undivided Athabascan system. With this as the criterion twenty-three stems are discernible which probably formed the major portion of the archaic Athabascan system. All of the twenty-three stems are found in California, eighteen in the northern Athabascan groups, and seventeen in the two southern Athabascan groups. I do not believe that this condition necessarily indicates that the Californian Athabascan kinship systems are the most archaic. The much fuller data from California and the law of chance undoubtedly explain the situation.

The fact that twenty-three archaic stems are derivable from existing Athabascan systems, while only eleven archaic stems are derivable from existing Yukian systems, is clearly a manifestation of the greater linguistic homogeneity of Athabascan.

The twenty-three archaic stems with their probable kinship meanings are as follows:

ta. Father.	tcai. Grandchild.
n8. Mother.	8n. Older brother.
an. Mother.	at. Older sister.
s8. Daughter.	tc8l. Younger brother.
yac. Son.	de. Younger sister.
yatce. Daughter.	kai. Mother's sister.
yat. Daughter-in-law.	la. Nephew-niece.
ye. Son.	be. Mother-in-law.
al Father's father.	8ntce. Father-in-law.
tcigi. Mother's father.	gandan. Son-in-law.
tco. Mother's mother.	ge. Sibling-in-law.
tsoi. Grandchild.	

Of the twenty-three terms presented above, several appear as though they might be of common origin. The cases I have in mind are yac, yatce, yat, and ye, for one, and tcigi, tco, tsoi, and tcai, for a second.

The archaic Athabascan system indicated by the fragmentary list of twenty-three terms was characterized by more than two grandparent terms and by four sibling terms.

*Shoshonean*

Dr. Kroeber characterized the major Shoshonean divisions some years ago. They are the Plateau, Southern California, Kern River (Tübatulabal), and Pueblo (Hopi) divisions. The last two are monotypic, while the first two embrace a large number of groups and may be further subdivided.<sup>69</sup>

In the following numbered groups the stems which are found in two or more of the Shoshonean major divisions are listed. Those limited to a single division are omitted.<sup>70</sup>

1. Northern Paiute na 1; Northeastern Mono na<sup>a</sup> 1; Southeastern Mono nawa 1, natakua 6, nauwatsi 6; Western Mono nau 1; Kitanemuk na 1; Serrano na 1; Gabrielino na 1; Fernandefio na 1; Juaneño na 1; Luiseño na 1; Cupeño na 1; Desert Cahuilla na 1; Hopi na'a 1, ña'ö 1; Archaic na 1.
2. Shoshoni apö' 1; Wind River Shoshoni apö 1; Tübatulabal apa 3, apavin 4; Archaic ap8 1.
5. Shoshoni rua<sup>a</sup> 2; Wind River Shoshoni rül 2; Northern Paiute tua 2; Northeastern Mono bisi<sup>a</sup> 1; Southeastern Mono vi<sup>a</sup> 1, vietsi 6; Western Mono vi<sup>a</sup> 1; Uintah Ute pien<sup>'</sup> 1; Kaibab Paiute piyan<sup>'</sup> 1; Kawaiisu piyüni 1; Tübatulabal piya 9; Kitanemuk piyani 6; Archaic pi8 1.
4. Tübatulabal yugu 6, yuguan 9; Kitanemuk yür 1; Serrano yu' 1, yür 6; Gabrielino yo 1; Juaneño yo 1; Luiseño yo 1, yosmai 6; Cupeño yi 1, yüsma 6; Desert Cahuilla yü 1, yüs 6; Archaic yü 1.
5. Shoshoni rua<sup>'a</sup> 2; Wind River Shoshoni ruI 2; Northern Paiute tua 2; Northeastern Mono tuwa 2; Southeastern Mono du<sup>a</sup> 2; Western Mono du<sup>a</sup> 2; Uintah Ute towan<sup>'</sup> 2; Kaibab Paiute tuwatsin<sup>'</sup> 2; Kawaiisu tuwüni 2; Tübatulabal tumu 2; Archaic tu 2.
6. Shoshoni vëdi' 2; Wind River Shoshoni pädi 2; Northern Paiute pade 2; Northeastern Mono väde 2; Southeastern Mono vädi 2; Western Mono väde 8; Uintah Ute patein<sup>'</sup> 2; Kaibab Paiute pätein<sup>'</sup> 2; Kawaiisu pedüni 2; Serrano polin 2; Cupeño polinma 2; Desert Cahuilla polin 2; Archaic p8d 2.
7. Shoshoni gönu' 3, mangönu' 8; Wind River Shoshoni könu 3; Northern Paiute kenu'u 3, kenupia 8; Northeastern Mono gunu' 3, kunupbiye 8; Southeastern Mono gunu 3, kunupbiye 8; Western Mono gunu 3; Uintah Ute qönun<sup>'</sup> 3, qönuntein<sup>'</sup> 4; Kaibab Paiute qunun<sup>'</sup> 3, qunutsin<sup>'</sup> 4; Kawaiisu kunoni 3, kunoteini 4; Kitanemuk kukin 3; Serrano ka' 3; Juaneño qä'm 2; Luiseño ka' 3, ka'mai 2; Cupeño ka' 3, kama 4; Desert Cahuilla ka' 3, kala 4, kalahiye 8; Archaic k8 3.
8. Uintah Ute qün<sup>'ni</sup> 6, qün'tein<sup>'</sup> 7; Kawaiisu kuguni 1, kuuteini 7; Tübatulabal kumu 1; Kitanemuk kwun 6; Serrano kumu 6; Luiseño kamu 6, kamumai 7; Cupeño kum 6, kumuma 7; Desert Cahuilla kum 6, kumu 7; Archaic kum 6.

<sup>69</sup> A. L. Kroeber, *Shoshonean Dialects of California*, present series, iv, 97, 1907.

<sup>70</sup> The Hopi and Wind River Shoshoni terms are from unpublished materials generously made available by Dr. Robert H. Lowie. The terms marked simply Shoshoni were similarly supplied by Dr. Edward Sapir, who informs me that they probably belong to the form of Shoshoni spoken in southern Idaho.



9. Kitanemuk kwadi 3, gwasü 8; Serrano kwat 3, kwa' 8, kwaritanak 8; Luiseño kwa 3, kwamai 4, kwapana 8; Cupeño kwa 3, kwama 4, kwama-pana 8; Desert Cahuilla kwa 3, kwala 4, kwalahena 8; Hopi kwa'a 3; Archaic kwa 3.
10. Northern Paiute mu'a 3; Northeastern Mono mu<sup>a</sup> 3; Southeastern Mono mu<sup>a</sup> 3; Western Mono mu 3; Tübatulabal ümü 1; Hopi möyi 4, möönaña'o 8; Archaic mu 3.
11. Southeastern Mono so' 3; Tübatulabal utsu 3, utsubin 4; Kitanemuk süsü 3; Serrano teur 3, teuritanak 8; Juaneño tu 3; Luiseño tu' 3, tu'mai 4, tu'pana 8, sosa 3; Cupeño sü 3, süma 4, sümapana 8; Desert Cahuilla su' 3, sola 4, solhena 8; Hopi so'o 3; Archaic s8 3.
12. Shoshoni vavi 5; Wind River Shoshoni babi 5; Northern Paiute pabi'i 5; Northeastern Mono vabi' 5; Southeastern Mono väbi 5; Western Mono bävi' 5; Uintah Ute pavin'' 5; Kaibab Paiute pavin''; Kawaiisu pavini 5, pavateini 4; Tübatulabal patci 5; Kitanemuk pat 5; Serrano pas 5; Juaneño pä'e 5; Luiseño pac 5; Cupeño pasma 5; Desert Cahuilla pas 5; Hopi BaBa 5; Archaic pav 5.
13. Northern Paiute hama'a 5; Northeastern Mono häme' 5; Southeastern Mono hama 5; Western Mono hama 5; Serrano hamut 5; Archaic hama 5.
14. Tübatulabal kutei 5; Kitanemuk kor 5; Serrano kör 5; Gabrielino kor 5; Juaneño qè's 5; Luiseño kes 5; Cupeño kisma 5; Desert Cahuilla kis 5; Archaic k8s 5.
15. Northern Paiute waña'a 5; Northeastern Mono wane<sup>e</sup> 5; Southeastern Mono waña 5; Western Mono wana 5; Cupeño wahali 5; Hopi ciwa 5; Archaic wa 5.
16. Kawaiisu saka.ini 5, saka.iteini 3; Tübatulabal saka 3, sakabin 4; Archaic saka 5.
17. Shoshoni namitein'' 5; Wind River Shoshoni nami 5; Uintah Ute namitein'' 5; Kaibab Paiute namintsin'' 5; Kawaiisu nama.ini 5, nama.iteini 3; Tübatulabal nalwali 5; Desert Cahuilla nawal 5; Archaic nama 5.
18. Tübatulabal tasi 8; Kitanemuk ta 6; Serrano tad 6; Luiseño tac 6; Cupeño tas 6; Desert Cahuilla tas 6; Hopi taha 6; Archaic ta 6.
19. Shoshoni vaha' 6; Wind River Shoshoni baha 6, bahambiI 6; Northern Paiute pahwa 6; Northeastern Mono bawha 6; Southeastern Mono bawha 6; Western Mono bawha 6; Uintah Ute pän'' 6, pätcin'' 7; Kaibab Paiute pään'' 6, päatsin'' 7; Kawaiisu pahani 6, pahateini 7; Tübatulabal pauwan 6; Serrano pa' 6; Luiseño pamai 6; Cupeño pa' 6; Desert Cahuilla pa 6; Archaic pa 6.
20. Tübatulabal aka 3, akabin 4; Kitanemuk a'kûna 7; Serrano aka 7; Archaic aka 3.
21. Tübatulabal amust 7; Kitanemuk amsit 7; Serrano ams 7, amsaiye 9; Luiseño alimai 7; Cupeño asisma 7; Desert Cahuilla asis 7; Archaic ams 7.
22. Northeastern Mono waisi 9; Southeastern Mono waisi 9; Western Mono waic' 9; Tübatulabal wasumbis 8; Cupeño was 8, waswuwit 8; Archaic was 8.

The manner in which terms for the uncle-aunt class (6) are derived from those of the parent class (1), terms for children-in-law (8) from those of the grandchild class (4), and terms for siblings-in-law (9) from those of the nephew-niece class (7), is well shown in the preceding lists (see numbers 1, 3, 4, 7, 9, 11, 21). This process is

especially clear in Shoshonean, which is notorious for its descriptive terms (see p. 277, also Shoshonean systems in detail).

The linguistic affinities of the kinship systems of the four major Shoshonean divisions are shown by the following tabulation which indicates the number of stems in common between each division and every other division.

TABLE 4

LINGUISTIC AFFINITIES OF KINSHIP SYSTEMS OF FOUR SHOSHONEAN DIVISIONS

	<i>Plateau</i>	<i>S. California</i>	<i>Tübatulabal</i>	<i>Hopi</i>
Plateau		12	11	5
S. California	12		12	6
Tübatulabal	11	12		4
Hopi	5	6	4	

Hopi stands aloof from the other three Shoshonean divisions. Its closest relative seems to be Southern California Shoshonean, with which it has six stems in common; its most distant relative is Tübatulabal, with which it has but four stems in common. The Plateau Shoshoneans are intermediate between these two extremes, having five stems in common with Hopi. My impression of the Hopi kinship system is that conceptually it displays a similar divergence from the other Shoshonean systems.

The following terms are found in at least three out of four of the major Shoshonean divisions, a fact which would seem to justify considering the terms as forming part of the original, undifferentiated, Shoshonean kinship system.

na. Father.	pav. Older brother.
k8. Father's parent.	wa. Younger sibling.
kum. Father's older brother.	ta. Mother's brother.
mu. Mother's mother.	pa. Father's sister.
s8. Mother's mother.	was. Relative-in-law.

It seems clear from the above list of ten hypothetical stems that Shoshonean is about in the same class with Yukian so far as linguistic differentiation is concerned. Athabascan with twenty-three stems seems vastly more homogeneous than either Yukian or Shoshonean. Conceptually the situation is similar.

The above hypothetical fragment of the original Shoshonean kinship system exhibits certain interesting points. I have already suggested the probable unity of the stems for father's parent and father's older brother. This would be in line with facts elsewhere (among the Pomo, for example), where the term for father's older brother appears

as derived from the grandparent class. If this is the case in Shoshonean systems, then those systems like the Mono, which have but one term for father's brother, are the more archaic.

The two stems for mother's mother are accountable for, in all likelihood, by a shift of meaning not at present apparent. Mother's brother and father's sister stand clearly designated by two distinct stems, which also occur in Yukian.

### *Penutian*

The case for Penutian is presented in the following lists of stems. The greater differentiation of the languages of the Penutian family, as compared with those of the Yukian, Athabascan, and Shoshonean families, is made patent by the absence of a single stem<sup>71</sup> common to all five of the Penutian divisions (Costanoan, Miwok, Yokuts, Wintun, and Maidu).

1. Mutsun Costanoan *uṭa* 1; Santa Clara Costanoan *utek* 5; Coast Miwok *tata* 6; Lake Miwok *tata* 6; Plains Miwok *ūka* 1, *tata* 6; Northern Miwok *ūta* 1; Central Miwok *ūta* 1; Southern (Yosemite) Miwok *ūta* 1; Southern (Pohonichi) Miwok *ūta* 5; Yachikamni Yokuts *i'ta* 1; Tachi Yokuts *nitet* 6; Yaudanchi Yokuts *natet* 6; Southeastern Wintun *dantee* 1; Southwestern Wintun *dantee* 1; Central Wintun *dan* 1; Northern Wintun (Shasta) *tata* 1; Northwestern Wintun (Trinity) *tata* 1; Archaic *ta* 1.
2. Rumsen Costanoan *ana* 1, *anakans* 6; Mutsun Costanoan *ana* 1; Santa Cruz Costanoan *anan* 1; Santa Clara Costanoan *ana* 1; Coast Miwok *unu* 1; Lake Miwok *unu* 1; Northern Miwok *anisū* 6; Central Miwok *anisū* 6; Southern (Yosemite) Miwok *anisū* 6; Southern (Pohonichi) Miwok *anisū* 6; Paleuyami Yokuts *na'hit* 1; Southeastern Wintun *nake* 1; Southwestern Wintun *nehe* 1; Central Wintun *na* 1, *nendet* 6; Northern Wintun (Shasta) *nene* 6; Northwestern Wintun (Trinity) *nene* 6; Southern Maidu *na* 1; Northeastern Maidu *ne* 1; Northwestern Maidu (Mts.) *ne* 1; Northwestern Maidu (Oroville) *ni* 1; Archaic *n8* 1.
3. Rumsen Costanoan *apa* 1; Mutsun Costanoan *apa* 1; Santa Cruz Costanoan *apnan* 1; Santa Clara Costanoan *apa* 1; Coast Miwok *api* 1; Lake Miwok *api* 1; Plains Miwok *appa* 1; Northern Miwok *üpü* 1; Central Miwok *üpü* 1, Central Miwok *apasti* 9; Southern (Yosemite) Miwok *üpü* 1; Southern (Pohonichi) Miwok *üpü* 1; Yachikamni Yokuts *nopop* 1; Knights Ferry Yokuts *dopo* 1; Chukchansi Yokuts *nopop* 1; Gashowu Yokuts *nupop* 1, *upo* 1, *popite* 1; Tachi Yokuts *poptoi* 1; Yaudanchi Yokuts *opoyo* 1; Yauelmani Yokuts *popo* 1, *nopop* 1; Paleuyami Yokuts *nopop* 1; Southeastern Wintun *ape* 3; Archaic *8p8* 1.
4. Rumsen Costanoan *papa* 3; Mutsun Costanoan *papa* 3, *apapaṭ* 4; Santa Cruz Costanoan *papa* 3; Coast Miwok *papa* 3; Lake Miwok *papa* 3; Plains Miwok *papa* 3; Northern Miwok *papa* 3; Central Miwok *papa* 3; Southern (Yosemite) Miwok *papa* 3; Southern (Pohonichi) Miwok *papa* 3; Tachi

<sup>71</sup> The case of group 2 may be an exception, but I honestly doubt if Paleuyami *na'hit* is cognate with the other terms in the group.

- Yokuts bapai 1; Yaudanchi Yokuts bap' 3; Yauelmani Yokuts bapa 3; Northwestern Maidu (Mts.) pa 3; Northwestern Maidu (Plains) pa 3; Archaic pa 3.
5. Lake Miwok elai 2, ela 5; Southeastern Wintun ilai 2; Southwestern Wintun ilai 2; Central Wintun elet 2; Northern Wintun (Shasta) ila 2; Southern Maidu ilai 2; Archaic ila 2.
  6. Southeastern Wintun de 2; Southwestern Wintun de 2; Southern Maidu de 1, te 2; Northeastern Maidu ta 2; Northwestern Maidu (Mts.) de 6; Northwestern Maidu (Plains) de 6; Archaic de 2.
  7. Lake Miwok ec 2, esgot 8; Northern Miwok esa 2; Central Miwok eselu 2; Chukchansi Yokuts neec 5; Gashowu Yokuts nees 5; Tachi Yokuts nees 5; Yaudanchi Yokuts neec 5; Yauelmani Yokuts nees 5; Paleuyami Yokuts niis 5; Archaic 8c 2.
  8. Mutsun Costanoan taure 2; Coast Miwok towe' 7; Lake Miwok towe' 7; Archaic towe 2.
  9. Northern Miwok kole 5; Central Miwok kole 5; Southern Maidu kole 7; Northwestern Maidu (Mts.) kole 2; Northwestern Maidu (Plains) kole 2; Archaic kole 2.
  10. Chukchansi Yokuts puteon 2; Gashowu Yokuts puteon 2; Tachi Yokuts puteon 2, witcep 2; Yaudanchi Yokuts buteon 2; Yauelmani Yokuts puteon 2, witcep 2; Northern Wintun (Shasta) biteen 2; Northwestern Wintun (Trinity) biteen 2, bitcende 7; Archaic p8tc8n 2.
  11. Rumsen Costanoan men 3, meresens 4, mers 8; Mutsun Costanoan mene 3, meres 4; Santa Cruz Costanoan mele 3, meres 4; Santa Clara Costanoan mele 3, merei 8, meric 8; Southern (Yosemite) Miwok mimu 8; Southern (Pohonichi) Miwok memu 8; Archaic men 3.
  12. Coast Miwok hama 3; Lake Miwok hama 3; Northern Miwok ama 3; Central Miwok ama 3; Southern (Yosemite) Miwok ama 3; Southern (Pohonichi) Miwok ama 3; Chukchansi Yokuts amalis 1; Gashowu Yokuts ama 1; Yauelmani Yokuts amatei 1; Southeastern Wintun amake 3; Central Wintun teama 3; Archaic ama 3.
  13. Coast Miwok amoko 6; Lake Miwok amko 6; Central Miwok ami 6; Southern (Yosemite) Miwok ami 6; Southern (Pohonichi) Miwok ami 6; Chukchansi Yokuts omis 1, noom 1; Gashowu Yokuts noom 1; Tachi Yokuts noom 1; Yauelmani Yokuts noom 1; Paleuyami Yokuts mime 6; Southern Maidu omo 6; Archaic 8m 6.
  14. Yaudanchi Yokuts t'uta 3; Yauelmani Yokuts tuta 7; Paleuyami Yokuts tut 3; Northern Wintun (Shasta) dutu 1; Northwestern Wintun (Trinity) tutu 1, teuteu 1; Archaic tutu 1.
  15. Santa Clara Costanoan teotcou 4; Coast Miwok teateai 4; Lake Miwok teatso 4, memtai 8; Plains Miwok teatco 4; Northern Miwok atee 4; Central Miwok atee 4; Southern (Yosemite) Miwok atee 4; Southern (Pohonichi) Miwok atee 4; Tachi Yokuts tantcai 8, teaiya 7; Yaudanchi Yokuts teaiyah 7; Yauelmani Yokuts teaiya 7; Central Wintun tee 4; Northern Wintun (Shasta) teai 4, teami 4; Northwestern Wintun (Trinity) teai 4; Archaic te8 4.
  16. Mutsun Costanoan tetomin 9; Plains Miwok tete 6; Northern Miwok tete 5; Central Miwok tete 5; Southern (Yosemite) Miwok tete 5; Southern (Pohonichi) Miwok tete 5; Archaic tete 5.
  17. Rumsen Costanoan tauasis 5; Mutsun Costanoan tare 5; Santa Clara Costanoan tale 5; Northern Miwok teale 5; Central Miwok teale 5; Archaic tale 5.

18. Mutsun Costanoan ka 2; Southern Maidu ka 5; Northeastern Maidu kam 5; Northwestern Maidu (Mts.) gam 5; Northwestern Maidu (Plains) ka 5; Archaic ka 5.
19. Coast Miwok kaka 6; Lake Miwok kaka 6; Plains Miwok kaka 6; Northern Miwok kaka 6; Central Miwok kaka 6; Southern (Yosemite) Miwok kaka 6; Southern (Pohonichi) Miwok kaka 6; Archaic kaka 6.
20. Rumsen Costanoan ete 6; Mutsun Costanoan ete 3; Santa Cruz Costanoan etnam 6; Santa Clara Costanoan ete 6; Plains Miwok ete 3; Northern Miwok ete 3; Southern Maidu eti 5; Northeastern Maidu eti 5; Northwestern Maidu (Mts.) eti 5; Northwestern Maidu (Plains) eti 5; Archaic et8 3.
21. Santa Cruz Costanoan ansi 6; Santa Clara Costanoan aŋci 6; Northern Miwok aŋsi 2; Central Miwok aŋsi 2; Southern (Yosemite) Miwok aŋsi 2; Archaic aŋsi 2.
22. Plains Miwok tune 7; Northern Miwok tune 2; Central Miwok tune 2; Southern (Yosemite) Miwok tune 2; Southern (Pohonichi) Miwok tune 2; Northwestern Wintun (Trinity) tunit 5; Southern Maidu tō 5; Southeastern Maidu tōni 5; Northwestern Maidu (Mts.) tūni 5; Northwestern Maidu (Plains) tu 5; Archaic tu 2.
23. Lake Miwok Len 9; Southeastern Wintun xen 9; Central Wintun Len 9; Northwestern Wintun (Trinity) xen 9; Archaic Len 9.
24. Northern Miwok maksi 9; Central Miwok maksi 9; Southern (Yosemite) Miwok maksi 9; Southern (Pohonichi) Miwok maksi 9; Chukchansi Yokuts makci 9; Gashowu makci 9; Tachi Yokuts makci 9; Yaudanchi Yokuts makci 9; Yauelmani Yokuts makci 9; Paleuyami Yokuts makci 9; Archaic makci 9.

TABLE 5

RELATIONSHIPS OF PENUTIAN KINSHIP SYSTEMS AS EXHIBITED BY DISTRIBUTION OF TWENTY-FOUR STEMS

	<i>Costanoan</i>	<i>Miwok</i>	<i>Yokuts</i>	<i>Wintun</i>	<i>Maidu</i>
Costanoan		11	5	4	4
Miwok	11		9	8	9
Yokuts	5	9		7	3
Wintun	4	8	7		4
Maidu	4	9	3	4	
	24	37	24	23	20

Table 5 shows the relationships of Penutian kinship systems as exhibited by the distribution of the twenty-four stems just listed. Costanoan and Miwok appear to be the most closely related. Miwok exhibits equal relationships with both Yokuts and Maidu. Furthermore, Miwok is more closely related to Maidu and Yokuts than these languages are to each other or to Wintun. The totals in the preceding table show Miwok to be the most generalized Penutian group, Maidu the most specialized. That Miwok has retained more archaic Penutian features than any other Penutian division does not necessarily follow, for Miwok with its discontinuous distribution is in broad contact with all four of its sister Penutian groups, while each of the other groups

is in broad contact with only two of its neighbors. Diffusion, therefore, may perhaps account for Miwok lack of specialization. It must be admitted, though, that the diffusion in this case might tend to perpetuate ancient forms.

The variety of meaning of apparently related terms in the several Penutian languages is perhaps one of the most interesting features of the preceding list. One feels almost prone to regard such a variety of meaning as a barrier to a common genesis of the terms. Yet one of the most startling cases occurs within a single dialectic group, the Southern Sierra Miwok. The instance I have reference to is that of the term *üta*, which in the vicinity of Yosemite valley means "mother" but a few miles away on the Fresno river and still within Southern Miwok boundaries means "younger sister." With such diversity of meaning within a single language almost anything may be expected between the five major Penutian divisions.

The number of stems in common between each two Penutian divisions (see table 5) substantiates in considerable measure Kroeber and Dixon's statements as to the historical interrelations of the Penutian languages based on broader linguistic material.<sup>72</sup> These authors combine Costanoan and Miwok to form the Uti group, on the one hand, and Yokuts, Wintun, and Maidu to form the Pen group, on the other hand.

In the twenty-four groups of Penutian stems it seems to me entirely likely that those in groups 3 and 4 have a common origin, that those in groups 12 and 13 are also genetically related, and possibly those in groups 18 and 19 also.

In selecting the possible archaic Penutian stems I have arbitrarily settled upon those stems occurring in three out of five of the Penutian divisions, providing the three are not Yokuts, Wintun, and Maidu, which go to form the Pen group of languages. As it happens, all stems occurring in three of the five divisions occur at the same time in both the Pen and Uti groups.

Ten out of twenty-four stems are common to three or more of the Penutian divisions. The following are the stems with their hypothetical meanings:

ta. Parent.	ama. Grandmother.
sp8. Father.	tc8. Grandchild.
n8. Mother.	8m. Mother's sister.
ila. Child.	et8.
pa. Grandfather.	tu.

<sup>72</sup> *Linguistic Families of California*, present series, xvi, 106, 1919.

The above hypothetical archaic Penutian kinship stems disclose a kinship system, the chief peculiarity of which is the three terms for the grandparent-grandchild relations.

It is self-evident that the small yield of terms common to only three out of five of the Penutian divisions is but another manifestation of the great linguistic differentiation which prevails in that family.

### *Hokan*

The task of grouping cognate Hokan kinship terms has been rendered easy by the already extensive groupings of Sapir,<sup>73</sup> Dixon, and Kroeber.<sup>74</sup> I have added but little to these groupings, which form the basis for the following lists. Certain of the diacritical marks employed by Dr. Sapir have been omitted for the sake of typographical convenience and to conform more to the simple orthography employed throughout this book.

There are twenty-eight stems presented in the following lists. Each stem is found in two or more of the ten Hokan languages: Karok, Chimariko, Shastan, Yana, Pomo, Washo, Esselen, Salinan, Chumash, and Yuman. Under the term Yana in the lists are included both Northern and Central Yana terms, and similarly under the heading Salinan are included both Migueleño and Antoniaño terms. Terms from the Mexican Hokan languages, Seri and Tequistlatecan, have been omitted from this study, just as Nahuatl and Piman terms were omitted from the study of the related Shoshonean terms.

1. Northeastern Pomo me 1; Northern Pomo amee 1; Central Pomo mede 1; Southeastern Pomo imek 1; Southern Pomo amen 1; Southwestern Pomo abe 1; Washo malolo 1; Archaic m8 1.
2. Karok aka 1, kohimateko 1; Chimariko iteila 1; Yana gaisina 1; Yahí gal 1; Washo koi 1; Salinan ek 1; Ynezeño Chumash qo 1; Barbareño Chumash koko 1; Island Chumash kaka 1; Mohave akut 1; Yuma ko 1; Cocopa ku' 1; Archaic k8 1.
3. Shasta ata 1; Achomawi titauui 7; Atsugewi tata 1; Washo ta 6; Salinan ta' 6; Ynezeño Chumash tata 6; Northern Diegueño tat 1; Southern Diegueño tat 1; Archaic ta 6.
4. Karok ta 1; Shasta atxi 1; Achomawi datyi 1; Atsugewi teitei 1; Northeastern Pomo tea'ki 1; Northern Pomo ate 1; Central Pomo tcede 1; Eastern Pomo te 1; Southeastern Pomo icek 1; Southern Pomo tete 1; Southwestern Pomo tete 1; Obispeño Chumash teuyu 1; Ynezeño Chumash tuq 1; Northern Diegueño tel 1; Southern Diegueño tel 1; Kamia tal 1; Mohave tai 1; Yuma tai 1; Cocopa tea 1; Archaic t8 1.

<sup>73</sup> E. Sapir, *The Position of Yana in the Hokan Stock*, present series, XIII, 3-16, 1917; also E. Sapir, in Roland B. Dixon and A. L. Kroeber, *Linguistic Families of California*, present series, xvi, 108-110, 1919.

<sup>74</sup> Roland B. Dixon and A. L. Kroeber, *Linguistic Families of California*, present series, xvi, 105, 106, 1919.

5. Shasta ani 1; Achomawi ani 1; Yana nina 1; Yahi ganna 1; Eastern Pomo nixa 1; Washo la 1; Barbareño Chumash ani 1; Island Chumash auni 1; Archaic n8 1.
6. Yana amaits'gi 2; Washo mehu 2; Northern Diegueño homai 2; Southern Diegueño homai 2; Kamia humai 2; Mohave humaich 2; Yuma homai 2; Cocopa homa 2; Archaic 8n8 2.
7. Achomawi balatci 2; Yana p!aun'i 2; Yahi p!aun'i 2; Northern Pomo panidai 2; Southern Pomo apakin 2, apankin 2; Southwestern Pomo pakin 2, pankin 2; Esselen pana 2; Archaic pan 2.
8. Karok yatekan 2; Shasta ayaki 2; Northern Diegueño yateikau 7; Yuma yats'kyu 7; Archaic ya 2.
9. Achomawi abun 3; Atsugewi apun 3; Northern Pomo aba 3; Central Pomo batse 3; Southeastern Pomo imbat 3; Southern Pomo abatsen 3; Southwestern Pomo baban 3; Washo bapa 3; Northern Diegueño inipau 3; Southern Diegueño inpau 3; Kamia inpau 3; Mohave apau 3; Yuma apau 3; Cocopa winpa 3; Archaic pa 3.
10. Chimariko himolla 4; Shasta amo 3; Achomawi amun 3; Yana amawi 3; Yahi amawi 3; Northeastern Pomo matcidai 3; matcedai 3; Northern Pomo ama 3, madai 3; Central Pomo matse 3; Eastern Pomo matsa 3, madili 3; Southeastern Pomo ima' 3; Southern Pomo amatsen 3; Southwestern Pomo maman 3; Washo ama 3; Esselen metce 3; Salinan ama' 3, temak 4; Ynezeño Chumash ama 3; Northern Diegueño inimau 3; Southern Diegueño inmau 3; Kamia inmau 3; Mohave amau 3; Yuma nemau 3; Cocopa numa 3; Archaic ma 3.
11. Shasta akwit 3; Northern Diegueño inikwa 3; Southern Diegueño inkwau 3; Kamia inkwau 3; Mohave nakeuk 3; Yuma nakwian 3; Cocopa inkwo 3; Archaic kw8 3.
12. Washo elei 3, eleli 4; Salinan nene 3; Ynezeño Chumash nene 3; Northern Diegueño inixel 3, axel 4; Southern Diegueño axel 4; Archaic el 3.
13. Karok gut 3, git 3; Achomawi akun 3; Atsugewi aqon 3; Northeastern Pomo kateidai 3; Northern Pomo kadai 3; Central Pomo katse 3; Eastern Pomo ghatsa 3, gatea 3; Southeastern Pomo imka 3; Southern Pomo akatsen 3; Southwestern Pomo kakan 3; Washo gu 3; Southern Diegueño inkûs 3; Mohave akau 3; Cocopa inika 3; Archaic ka 3.
14. Shasta atcidi 3; Achomawi ateun 3; Atsugewi teuwa 3; Yana t'u'aina 3; Yahi 'a'dyu 3; Northeastern Pomo tatcedai 3; Northern Pomo tsadai 3; Central Pomo djate 3; Southeastern Pomo imtcen 3; Southern Pomo atcatsen 3; Southwestern Pomo tatan 3; Archaic tc8 3.
15. Achomawi atun 5, tiyau 5; Atsugewi t'ida 5; Yana t'linisi 2; Northern Pomo tidai 5; Washo at'u 5; Salinan t'on 5; Ynezeño Chumash tu'n 2; Archaic t8n 5.
16. Shasta apo 5; Achomawi waba.ui 5; Atsugewi pupa 5; Central Pomo mex 5; Southeastern Pomo imex 5; Southern Pomo amigin 5; Washo peyu 5; Esselen mits 5; Salinan pe' 5; Ynezeño Chumash pepe 5; Archaic p8 5.
17. Karok djac 5; Central Pomo djacwe 2; Northern Diegueño intcamal 5; Southern Diegueño intcamal 5, intcaitecûn 5; Kamia intcamal 5, intcaitecûn 5; Archaic tea 5.
18. Karok djic 5, heite 2; Chimariko iteumda 8; Shasta atsi 5, ateu 5; Achomawi abis 5; Yana isi'yauna 5; Yahi isi'yauna 5; Washo isa 5; Esselen itci 5; Ynezeño Chumash is 5; Mohave isuichk 5; Cocopa hidjisa 5; Archaic ic 5.
19. Washo euci 6; Ynezeño Chumash nûc 6; Northern Diegueño uwis 6; Archaic uc 6.



20. Karok miidjits 6; Chimariko mutala 6; Achomawi hamut 6; Yana muxdi 6; Yahí musdi 6; Northern Pomo mudai 6, wudai 6; Central Pomo mute 6; Eastern Pomo weha 6; Southeastern Pomo imwe 6; Southern Pomo mutsen 6; Southwestern Pomo mutsen 6; Washo ya 6; Ynezeño Chumash wa 6; Archaic mu 6.
21. Karok djukate 6; Achomawi teini 6; Atsugewi tsinii 6; Yana udji' 6; Yahí u'dji' 6; Northeastern Pomo sudai 6; Northern Pomo tsudai 6, sudai 6; Central Pomo djute 6, cuts 6; Southern Pomo adjutsen 6, acutsen 6; Southwestern Pomo djutsen 6, dutun 6, djutgi 7; Archaic dj8 6.
22. Chimariko cido 1; Achomawi tsimam 6; Northern Pomo cedai 6; Central Pomo ceki 6; Eastern Pomo cex 6; Southern Pomo acigin 6; Southwestern Pomo cigin 6; Washo ca'ca 6; Northern Diegueño inisil 6; Southern Diegueño insil 6; Mohave aθi; Archaic c8 6.
23. Chimariko magolai 6, teumaku 8, teumakose 8; Washo magu 7; Archaic mako 6.
24. Chimariko masolai 2, micakui 7; Washo maca 7; Archaic m8ca 7.
25. Southwestern Pomo muya 8; Ynezeño Chumash mus 8; Northern Diegueño mus 8; Southern Diegueño mus 8; Kamia mus 8; Archaic mus 8.
26. Achomawi wahakui 8; Washo ayuk 8; Esselen isikis 8; Archaic — 8.
27. Karok eri 9; Washo uladut 9; Archaic — 9.
28. Shasta iyaki 9; Yahí ya'gaihi 9; Washo yangil 9; Mohave yak 5; Yuma yak 5; Cocopa yathus 5; Archaic yak 9.

The astonishing thing about the lists of Hokan terms is the relatively large number of stems which retain the same meaning (or at least belong to the same class of relatives) in the various languages. This is true of eighteen of the twenty-eight (64 per cent) of the Hokan stems. In the lists of Penutian stems, it is true of only about 25 per cent of the stems. Considering the geographic distribution of the two families, Penutian and Hokan, the result is the reverse of what might be expected. The compact Penutian area would seem to bespeak homogeneity, the numerous isolated and widely scattered Hokan areas to bespeak heterogeneity. Yet linguistically the situation is the reverse.

Six out of twenty-eight stems are each found in six or more of the ten Hokan languages. Six others are common to half of the languages and the remaining sixteen are common to from two to four of the languages. I am arbitrarily setting 50 per cent as the minimum occurrence which warrants considering a stem as forming part of the archaic Hokan kinship system. This figure is lower by 10 per cent than that allowed for Penutian, but I think is justifiable on account of the discontinuous distribution of the Hokan languages of California. The following are the twelve stems common to at least 50 per cent of the Californian Hokan languages.

k8. Father.	t8n. Younger sibling.
t8. Mother.	p8. Older brother.
n8. Mother.	ic. Older sister.
pan. Child.	mu. Father's sister.
ma. Father's parent.	c8. Mother's sister.
ka. Mother's parent.	ta. Mother's brother.

The above list of twelve hypothetical archaic stems should probably be reduced to eleven by combining the two stems for mother, t8 and n8, as Dr. Sapir does.<sup>75</sup> This leaves us a fragment of a system which contains a single stem for offspring, at least two for grandparents, three for siblings, and at least three for uncle-aunts. A term for father's brother is conspicuous by its absence; in fact, only in the fragment of the archaic Shoshonean system do we find a term for this relation. Its general absence brings to mind the possibility that the levirate is responsible.

### *Comparison of Hypothetical Archaic Systems*

A comparison of the types of systems indicated by the fragments of hypothetical archaic kinship systems presented in the preceding pages is best made by means of table 6, in which similar hypothetical relationships are ranged together. No relationship is expressed in the hypothetical fragments of all five linguistic families. The order of frequency of expression of relationships in the five linguistic families is as follows: mother 4, father 4, grandchild 3, older brother 3, mother's brother 3, mother's sister 3, child 2, father's parent 2, father's father 2, mother's mother 2, younger sibling 2, older sister 2, father's sister 2, nephew-niece 2, and all other terms which are represented in table 6 but once. The frequency of terms for mother's brother and mother's sister would delight a matriarchist, but is in part offset by the stress on father's parents. In any event, it seems possible that the frequency of these hypothetical archaic stems in the five families under consideration may include the relationships which were the most important in the primitive society of thousands of years ago.

Table 6 also exhibits some interesting interrelations between the five linguistic families. The following list gives the number of hypothetical archaic relationships in common between each two families:

Athabaskan-Yukian.....	4
Athabaskan-Hokan.....	5
Athabaskan-Shoshonean.....	3
Athabaskan-Penutian.....	4
Yukian-Hokan.....	2
Yukian-Shoshonean.....	1
Yukian-Penutian.....	2
Hokan-Shoshonean.....	6
Hokan-Penutian.....	4
Shoshonean-Penutian.....	1

<sup>75</sup> Present series, xvi, 109, 1919.

TABLE 6  
COMPARISON OF FRAGMENTS OF HYPOTHETICAL ARCHAIC KINSHIP SYSTEMS

<i>Athabascan</i> (19 relationships)	<i>Yukian</i> (11 relationships)	<i>Hokan</i> (11 relationships)	<i>Shoshonean</i> (9 relationships)	<i>Penutian</i> (8 relationships)
Mother.....	Mother.....	Mother.....	.....	Parent.....
Father.....	.....	Father.....	Father.....	Mother.....
Son.....	.....	Child.....	.....	Father.....
Daughter.....	.....	Father's parent.....	.....	Child.....
.....	.....	Mother's parent.....	Father's parent.....	.....
Father's father.....	Father's father.....	.....	.....	.....
Mother's father.....	Father's mother.....	.....	.....	Grandfather.....
Mother's mother.....	.....	.....	.....	Grandmother.....
Grandchild.....	Grandchild.....	.....	.....	.....
.....	Sibling.....	.....	Mother's mother.....	Grandchild.....
Older brother.....	.....	Younger sibling.....	.....	.....
Older sister.....	.....	Older brother.....	Younger sibling.....	.....
Younger brother.....	.....	Older sister.....	Older brother.....	.....
Younger sister.....	.....	.....	.....	.....
.....	.....	.....	Father's older brother.....	.....
Mother's sister.....	Mother's brother.....	Father's sister.....	Father's sister.....	Mother's sister.....
.....	Father's older sister.....	Mother's brother.....	Mother's brother.....	.....
.....	Father's younger sister.....	Mother's sister.....	.....	.....
Nephew-niece.....	Nephew-niece.....	.....	.....	.....
.....	Male relative-in-law.....	.....	Relative-in-law.....	.....
.....	Female relative-in-law.....	.....	.....	.....
Father-in-law.....	.....	.....	.....	.....
Mother-in-law.....	.....	.....	.....	.....
Son-in-law.....	.....	.....	.....	.....
Daughter-in-law.....	.....	.....	.....	.....
Sibling-in-law.....	.....	.....	.....	.....

The sum total of resemblances for each of the five families is: Hokan 17, Athabascan 16, Shoshonean 11, Penutian 11, Yukian 9. The relatively high figures for Hokan and Athabascan seem likely to be in part the result of widely scattered distribution, and consequently varying types of culture.

Another interesting feature of our list is the high degree of affinity which Hokan exhibits for both Athabascan and Shoshonean. These three families are constituted of tribes which I have frequently characterized as peripheral in opposition to the nuclear Penutians of the great valley of California. Even on the basis of hypothetical archaic kinship terms, this antithesis of periphery and nucleus, of mountain and valley, is still apparent. At the same time we are brought face to face again with the question as to how much of this is due to language and how much to diffusion.

### *Conceptual and Linguistic Homogeneity*

On page 217 I listed percentages designed to show the relative conceptual homogeneity of the kinship systems of the Californian representatives of the five families we have been considering. The percentages are as follows: Athabascan 73, Yukian 61, Shoshonean 59, Penutian 58, and Hokan 48.

I aim now to compare the linguistic differentiation in the five families with the above mentioned conceptual differentiation in order to see if the two are parallel. Certain difficulties present themselves. The percentages above are based on California data only, while my Athabascan and Shoshonean figures for linguistic differentiation include groups beyond the Californian border.

Naturally, linguistic differentiation is made manifest by few stems in common, and, conversely, linguistic homogeneity by many stems in common. The number of stems that have been listed for each family as fragments of hypothetical archaic systems will therefore serve as the desired index. The figures follow: Athabascan 23, Yukian 11, Shoshonean 10, Penutian 10, Hokan 12. However, the selection in each case varied. In selecting the twenty-three Athabascan stems I chose those common to two out of three of the major Athabascan groups; but in selecting Yukian and Shoshonean stems the choice was from three out of four, while for Penutian it was three out of five, and for Hokan five out of ten. We cannot therefore take the number of stems at their face value, but must seek a least common denominator

for our several fractions; that least common denominator is sixty. The usual mathematical processes bring us the following figures as indices of the relative linguistic homogeneity within each family. These are placed beside the figures indicative of conceptual homogeneity.

TABLE 7  
CONCEPTUAL AND LINGUISTIC HOMOGENEITY

	<i>Conceptual</i>	<i>Linguistic</i>
Athabascan.....	73 (California only).....	35
Yukian.....	61 .....	15
Shoshonean.....	59 (California only).....	13
Penutian.....	58 .....	17
Hokan.....	48 .....	24

The figures clearly indicate that there is no absolute correlation between conceptual homogeneity and linguistic homogeneity in kinship systems. The most eloquent proof of this is to be found in the Hokan kinship systems, which show great conceptual heterogeneity, but medium linguistic homogeneity. Shoshonean, at first glance, appears to represent the opposite situation, medium conceptual homogeneity and maximum linguistic heterogeneity. It must be remembered, however, that, on the conceptual side, only Californian Shoshoneans are represented. Were extra-Californian Shoshoneans (notably Hopi) included, the figure for conceptual homogeneity would fall considerably. The case of Shoshonean would then stand as an example of conceptual heterogeneity accompanying linguistic heterogeneity, just as Athabascan is a case of conceptual homogeneity accompanying linguistic homogeneity, although here again the conceptual figure refers to California only, and would doubtless be lowered if Canadian and Southwestern Athabascans were considered.

All of this brings us back to the point which the table as a whole displays, namely, that there is no absolute correlation between conceptual and linguistic homogeneity. In other words, the kinship stems may remain, but the ideas expressed by those stems may vary considerably, as in the case of Penutian, or but little, as in the case of Athabascan. Or yet again, the stems may in large measure vanish, as in Shoshonean and Yukian. In the case of Shoshonean (including Hopi), however, we have a corresponding disappearance of concepts.<sup>76</sup>

<sup>76</sup> I have made no numerical conceptual comparison of the extra-Californian Shoshonean systems. The above statement is warranted, however, by the marked divergence of Hopi from the Shoshonean norm.

With such variable relations between the conceptual and linguistic aspects of kinship terms it becomes increasingly apparent that kinship systems are not phenomena of language alone. It is clear that the lack of correlation between language and concept is by no means entirely the result of the operation of linguistic factors, but must in large measure be attributed to a variety of causes, both internal and external. The internal factors are undoubtedly linguistic, psychic, and social, while the external factors, which may well operate through the three internal factors just mentioned, are contact and diffusion.

### *Widespread Stems*

The last section closed with a statement of the case for language versus diffusion. It is impossible, however, to leave the matter entirely without calling attention to the rather numerous cases of stems, to a considerable extent with similar meanings, common to two or more of the major linguistic groups. It is probable that some apparent resemblances are due to faulty isolation of stems on my part. Other resemblances are undoubtedly genuine. I shall leave it to my reader, however, to attribute these resemblances to diffusion if he likes, or again to a common origin in baby talk, or still again to a common genesis of the several linguistic families concerned. This last possibility is one which Dr. Paul Radin has already presented.<sup>77</sup>

In the following table I am presenting the chief resemblances which appear in lists of hypothetical archaic stems dealt with in the preceding sections. Careful study of each kinship system would develop many more cognate stems. I think the table speaks for itself. The numbers in parentheses indicate the class of relatives in which each stem is employed: 1 parent, 2 child, 3 grandparent, 4 grandchild, 5 sibling, 6 uncle-aunt, 7 nephew-niece, 8 parent-in-law and child-in-law, 9 sibling-in-law.

The languages treated in the table are Athabascan, Yukian, Shoshonean, Penutian, Hokan, and Algonkin. Lutuamian is omitted. The Algonkin stems are Wiyot or Yurok only and are taken from Dr. Sapir's as yet<sup>78</sup> unpublished paper on "The Algonkin Affinity of Yurok and Wiyot Kinship Terms."

<sup>77</sup> The Genetic Relationship of the North American Indian Languages, present series, xiv, 489-502, 1919.

<sup>78</sup> May 7, 1920.

TABLE 8  
KINSHIP STEMS OCCURRING IN MORE THAN ONE LINGUISTIC FAMILY

Algonkin.....	(1) da	.....	.....	.....	(1) ka	.....	.....	(2) ta
Athabaskan.....	(1) ta	.....	.....	(1) n8	(1) ma	(2) yac	.....	.....
Yukian.....	.....	.....	.....	(1) n8	.....	.....	(2) kil	.....
Hokan.....	(1) t8	.....	.....	(1) n8	(1) m8	(2) ya	(2) pan	.....
Penutian.....	(1) ta	.....	(1) 8p8	(1) n8	.....	.....	(2) p8tc8n	(2) t8
Shoshonean.....	.....	.....	(1) ap8	(1) na	.....	.....	(2) p8d	(2) tu
Algonkin.....	.....	.....	.....	.....	(3) tco	.....	.....	(5) w8yi
Athabaskan.....	(7) la	.....	.....	.....	(3) tco	(3) m8	.....	(5) tc8l
Yukian.....	.....	(3) te	.....	(3) p8p	(7) tc8	.....	.....	.....
Hokan.....	.....	.....	.....	(3) pa	(3) tc8	(3) ma	(3) kw8	(5) tca
Penutian.....	(2) ila	(3) ete	.....	(3) pa	(4) tc8	(3) m8	.....	(5) tale
Shoshonean.....	.....	.....	.....	.....	(3) s8	(3) mu	(3) kwa	(5) wa
Algonkin.....	.....	(5) pa	.....	(5) lai	.....	.....	(6) djo	.....
Athabaskan.....	.....	.....	.....	.....	.....	(6) kai	.....	(9) dji
Yukian.....	(5) k8	.....	.....	(5) l8	(6) ta	(6) pa	.....	(9) dji
Hokan.....	.....	(5) p8	.....	.....	(6) ta	.....	(6) dj8	(9) dji
Penutian.....	(5) ka	.....	.....	.....	.....	(6) kaka	.....	.....
Shoshonean.....	(5) k8s	(5) pav	.....	.....	(6) ta	(6) pa	.....	(8) was

## SOCIETY

With regard to social determinants of kinship systems, my attitude is empirical, not dogmatic. I regard no social custom as an infallible cause of a given kinship feature. In fact, my data militate against a categorical attitude. The data about to be presented will make clear the pitfalls which beset one who approaches the subject with the idea that "we have here a case in which the principle of determinism applies with a rigour and definiteness equal to that of any of the exact sciences."<sup>79</sup>

The Californian data make it very clear that the results of the action of a social institution upon kinship systems vary in great measure, in some cases producing no effect, in others the maximum of effect. Some kinship systems resist change, others invite it, and at the bottom of the matter probably lie varying psychic and linguistic complexes.

The ensuing sections by no means cover the whole range of possible social determinants: they treat only of those warranted by the data in hand.

### SISTER-IN-LAW MARRIAGE AND GROUP EXOGAMY

#### Map 26

Under the title of sister-in-law marriage I include the two practices of marriage to the deceased brother's wife (levirate) and of marriage to the wife's sister either before or after the wife's death. The levirate was probably well-nigh universal in California. The only specific denial of its presence comes from the Yuma and Kamia, who claim that the presence of the widow in the surviving brother's family would cause sorrow. The Cupeño also denied practicing either form of sister-in-law marriage. The custom of marriage to the wife's sister seems to go hand in hand with the levirate. The known distribution of the two customs is shown in the following lists.

*Levirate*.—Tolowa, Hupa, Lassik, Wailaki, Kato, Yurok, Wiyot, Chimariko,<sup>80</sup> Shasta, Achomawi, Yahi,<sup>81</sup> Northwestern Maidu,<sup>82</sup> North-

<sup>79</sup> W. H. R. Rivers, *Kinship and Social Organisation* (London, Constable & Co., Ltd., 1914), 93.

<sup>80</sup> Roland B. Dixon, *The Chimariko Indians and Language*, present series, v, 301, 1910.

<sup>81</sup> E. Sapir, *Terms of Relationship and the Levirate*, *Am. Anthr.*, n. s., XVIII, 330, 1916.

<sup>82</sup> Roland B. Dixon, *The Northern Maidu*, *Bull. Am. Mus. Nat. Hist.*, xvii, 239, 1905.



eastern Maidu,<sup>83</sup> Western Mono, Serrano, Desert Cahuilla, Cocopa, Southern Diegueño, Yauelmani, Yaudanchi, Central Miwok, Lake Miwok, Central Wintun, Southeastern Pomo, Eastern Pomo,<sup>84</sup> Central Pomo, Northern Pomo, Southwestern Pomo, Southern Pomo, Huchnom, Yuki, Coast Yuki.

*Wife's Sister Marriage*.—Tolowa, Hupa, Lassik, Wailaki, Yurok, Wiyot, Chimariko,<sup>85</sup> Shasta,<sup>86</sup> Achomawi, Yahí,<sup>87</sup> Northeastern Maidu,<sup>88</sup> Western Mono, Serrano, Desert Cahuilla, Luiseño,<sup>89</sup> Yuma, Kamia, Cocopa, Southern Diegueño, Yauelmani, Yaudanchi, Gashowu, Central Miwok, Eastern Pomo,<sup>90</sup> Central Pomo, Northern Pomo, Huchnom, Coast Yuki.

The problem which confronts us is to determine just how far the levirate and marriage to the wife's sister are responsible in the shaping of kinship systems. Both Dr. Sapir<sup>91</sup> and I<sup>92</sup> have assumed for these two customs a prominent rôle in two Central Californian groups, the Yahí and the Central Miwok. Upon reinspection I must say that it certainly seems likely that all of the kinship traits which we laid to sister-in-law marriage arose through that medium.

The principal terminological equations which might follow as the result of the two forms of sister-in-law marriage are listed below. Distinctions as to whether father's older or younger brother or mother's older or younger sister are equated to the parents or step-parents have been ignored.

1. Father's brother equals father.
2. Step-father equals father's brother.
3. Mother's sister equals mother.
4. Step-mother equals mother's sister.
5. Mother's sister's husband equals father.
6. Mother's sister's husband equals step-father.
7. Father's brother's wife equals mother.

<sup>83</sup> *Ibid.*, p. 241.

<sup>84</sup> A. L. Kroeber, unpublished notes.

<sup>85</sup> Roland B. Dixon, *The Chimariko Indians and Language*, present series, v, 301, 1910.

<sup>86</sup> Roland B. Dixon, *The Shasta*, *Bull. Am. Mus. Nat. Hist.*, xvii, 464, 1907.

<sup>87</sup> E. Sapir, *Terms of Relationship and the Levirate*, *Am. Anthr.*, n. s., xviii, 330, 1916.

<sup>88</sup> Roland B. Dixon, *The Northern Maidu*, *Bull. Am. Mus. Nat. Hist.*, xvii, 241, 1905.

<sup>89</sup> Philip Stedman Sparkman, *The Culture of the Luiseño Indians*, present series, viii, 214, 1908.

<sup>90</sup> A. L. Kroeber, unpublished notes.

<sup>91</sup> E. Sapir, *Terms of Relationship and the Levirate*, *Am. Anthr.*, n. s., xviii, 327, 1916.

<sup>92</sup> *Miwok Moieties*, present series, xii, 181, 1916.

8. Father's brother's wife equals step-mother.
9. Man's brother's son or daughter equals son or daughter.
10. Woman's sister's son or daughter equals son or daughter.
11. Man's step-son or step-daughter equals man's brother's son or daughter.
12. Woman's step-son or step-daughter equals woman's sister's son or daughter.
13. Wife's sister's son or daughter equals son or daughter.
14. Husband's brother's son or daughter equals son or daughter.
15. Wife's sister's son or daughter equals man's step-son or step-daughter.
16. Husband's brother's son or daughter equals woman's step-son or step-daughter.
17. Parallel cousins only equal siblings.

In addition to the seventeen equations listed above, two others are true of the Yahi only and are omitted from the list: Wife's sister equals wife and husband's brother equals husband. Both are eloquent of sister-in-law marriage.

In table 9 the seventeen equations are represented by the numbers across the top of the table. The tribes are listed by name at the left, together with an indication of the presence or absence of group exogamy. A cross in a square indicates the presence of the equation, a zero its absence. Many tribes with nomenclatorial features resulting from sister-in-law marriage are omitted because the data are insufficient to cover the seventeen equations. This lack of data renders the tribes in question unsuitable for comparison with those from which full data are available. Table 9 should therefore not be regarded as a catalogue of all Californian tribes possessing the terminological features of sister-in-law marriage.

On its face table 9 shows very clearly that, so far as California is concerned, it is impossible to demonstrate that the presence of group exogamy is responsible for the simplifications represented by the seventeen equations. The most that can be said is that group exogamy may be responsible for the simplifications exhibited by a number of those central Californian tribes organized on the basis of moieties. Yet even in this small group there are contradictions: The Tachi moieties are exogamous, the Western Mono moieties are not; still the Tachi have but nine out of seventeen kinship equations, while the Western Mono have sixteen out of seventeen. On this count the case for group exogamy as a kinship determinant in California is surely dubious.

Much the same sort of destructive criticism may seem applicable to sister-in-law marriage as the ultimate determinant of the equations. Yet for such destructive criticism we must assume that the original basis which sister-in-law marriage alters is everywhere the same. Such is certainly not the case, for on every hand are different linguistic,

TABLE 9

OCCURRENCE OF SEVENTEEN TERMINOLOGICAL EQUATIONS RESULTING  
FROM SISTER-IN-LAW MARRIAGE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
<b>Exogamous moieties, no clans:</b>																		
Southern Miwok.....	x	o	x	x	x	o	x	x	x	x	x	x	x	x	x	x	x	15
Central Miwok.....	x	o	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Northern Miwok.....	x	o	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Tachi.....	o	x	o	x	o	x	o	x	x	x	o	o	x	x	o	o	x	9
Chukchansi.....	x	x	o	x	x	x	o	x	x	x	x	x	x	x	x	x	x	15
<b>Non-exogamous moieties, subdivided:</b>																		
Western Mono.....	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o	16
<b>Exogamous moieties, localized clans:</b>																		
Serrano.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Desert Cahuilla.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Cupeño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
<b>No moieties, localized exogamous clans:</b>																		
Luisefño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Southern Diegueño.....	o	o	o	x	o	o	o	x	o	o	o	x	o	o	o	x	x	5
Northern Diegueño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
<b>No moieties, exogamous clans:</b>																		
Yuma.....	o	o	o	o	o	o	o	x	o	o	o	o	o	o	o	x	o	2
Kamia.....	o	o	o	o	o	o	o	x	o	o	o	o	o	o	o	x	x	3
Cocopa.....	o	o	o	o	o	x	o	x	o	o	o	o	o	o	o	x	x	5
<b>No group exogamy:</b>																		
Hupa.....	o	x	o	x	o	o	o	o	o	o	x	x	o	o	o	o	o	4
Whilkut.....	o	x	o	x	o	o	o	o	o	o	x	x	o	o	o	o	o	4
Tolowa.....	o	o	o	x	o	o	o	o	o	o	o	x	o	o	o	o	x	3
Lassik.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Sinkyone.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Kato.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Wailaki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Wiyot.....	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.....
Yurok.....	o	x	o	x	o	o	o	o	o	o	x	x	o	o	o	o	o	4
Karok.....	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.....
Shasta.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Achomawi.....	o	o	o	o	o	x	o	x	o	o	o	o	o	o	x	x	o	4
Lutuami.....	o	o	o	o	o	x	o	x	o	o	o	o	o	o	x	x	o	4
Yahi.....	x	o	x	o	o	o	o	x	x	x	o	o	x	o	o	x	x	8
Northwestern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Northeastern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Southern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Eastern Mono.....	o	o	o	o	o	o	o	x	x	x	x	x	x	x	x	x	o	9
Tübatulabal.....	o	x	o	x	o	x	o	x	x	o	o	x	x	o	o	o	o	8
Yauelmani.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Yaudanchi.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	o	12
Coast Miwok.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Lake Miwok.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Southeastern Wintun.....	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Southwestern Wintun.....	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Central Wintun.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Northern Wintun.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x	9
Southeastern Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Eastern Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Central Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Northern Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Southwestern Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Southern Pomo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Wappo.....	o	x	o	x	o	x	o	x	x	x	x	x	x	x	x	x	x	13
Huchnom.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Yuki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8
Coast Yuki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o	8

cultural, and psychological settings of kinship systems against which sister-in-law marriage must operate.<sup>93</sup> Compare Wiyot and Western Mono, for instance. Wiyot has already been noted for its extreme conservatism, which is again apparent in that it seems to have been wholly unaffected by the tribal custom of sister-in-law marriage. Western Mono, on the other hand, has sixteen out of the seventeen equations, which is in line with the plasticity which it displays in naming certain relatives (see uncle class especially). It seems to me a clear case that the results of sister-in-law marriage must vary as the original unmodified kinship systems vary. Naturally the tendency of sister-in-law marriage is to bring about resemblances between diverse kinship systems. The degree of reduction through sister-in-law marriage to a common type is therefore undoubtedly, but hardly demonstrably, in direct ratio with the degree of plasticity of the kinship systems upon which sister-in-law marriage operates.

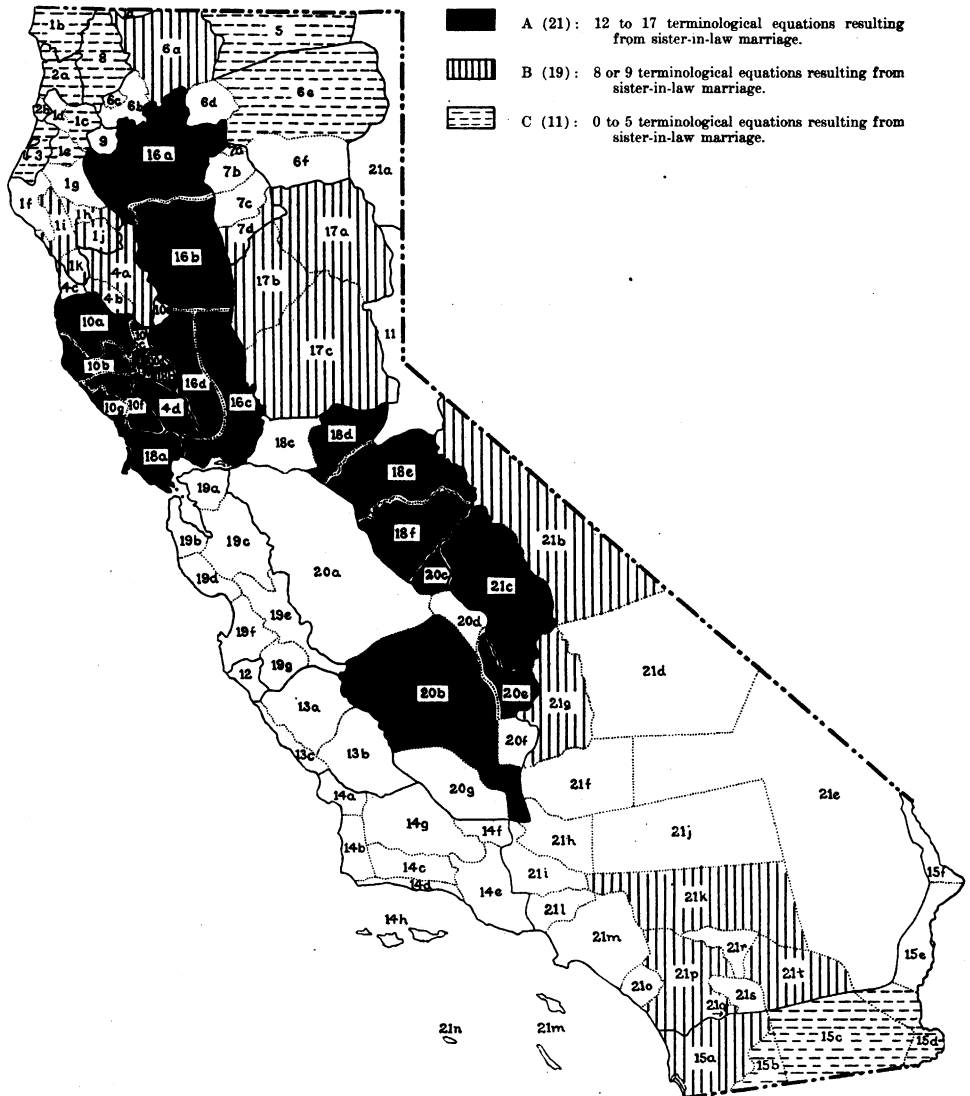
Diffusion, too, is likely to play a part. Once sister-in-law marriage has brought about a certain set of equations in one tribe, these may be adopted by neighboring tribes which may, and in all probability already, have sister-in-law marriage. Western Mono I believe to be a case in point. Its sixteen equations are the result of Penutian contact, for its congener, Eastern Mono, has but nine equations.

Referring to table 9 again, it will be seen that there are twenty-two tribes with eight and nine equations, which seem to be about the average. There are ten tribes with five or less and two (Wiyot and Karok) with none. The remaining eighteen tribes have from twelve to seventeen equations. It is in these eighteen tribes that we find the maximum result of sister-in-law marriage. Let us plot our data upon a map (map 26) and visualize the distribution of three groups of tribes, to wit: (A) those with twelve to seventeen equations, (B) those with eight and nine equations, (C) those with five to zero equations.

The maximum results of sister-in-law marriage have been attained in Central California and notably among the Southeastern and Southwestern Wintun, who have all seventeen of the equations. The equations take on a Penutian aspect when we note that, with the exception of the Tachi, the Yauelmani, the Northern Wintun, and the aberrant Maidu, all Penutian groups have twelve or more of the equations. The departures from the Penutian norm may well be due to foreign influence. A close examination of the cases of Penutian divergence reveals certain of them as more apparent than real. The absence of

<sup>93</sup> This statement applies also to the operation of group exogamy as a determinant.

equations 11, 12, 15, and 16 in the Tachi kinship system is due to the use of special terms for step-children. These terms, however, are really dependent upon sister-in-law marriage, for they are based on



Map 26.—The influence of sister-in-law marriage.

the stems for offspring. The same remarks apply to Northern Wintun. Yauelmani applies to step-children the terms which in the related Tachi dialect mean children. These apparent but not real exceptions (which have been ignored on the map by the placing of these three

groups in class A) emphasize the truly Penutian character of the equations. The only real Penutian exception, as usual, is Maidu.

Regarding the seventeen equations as essentially Penutian traits forces upon us the conclusion that the marked adherence of the adjacent Western Mono, Pomo, and Wappo to the equations is in large measure the result of Penutian example, an explanation already frequently advanced for other kinship traits.

TABLE 10

DEVELOPMENT OF TERMINOLOGICAL EQUATIONS AMONG NINETEEN TRIBES WITH BUT EIGHT OR NINE OUT OF SEVENTEEN EQUATIONS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Serrano.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Desert Cahuilla.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Cupeño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Luisefño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Northern Diegueño.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Shasta.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Northwestern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Northeastern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	x
Southern Maidu.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Lassik.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Sinkyone.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Wailaki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Kato.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Huchnom.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Yuki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Coast Yuki.....	o	x	o	x	o	x	o	x	o	o	x	x	o	o	x	x	o
Tübatulabal.....	o	x	o	x	o	x	o	x	x	x	o	o	x	x	o	o	o
Eastern Mono.....	o	o	o	o	o	o	o	x	x	x	x	x	x	x	x	x	o
Yahi.....	x	o	x	o	o	o	o	x	x	x	o	o	x	o	o	x	x

Table 10 segregates nineteen of the twenty-two tribes which have eight or nine of the equations. The three tribes excepted, Northern Wintun, Tachi, and Yauelmani, have already been discussed. All but three of the nineteen tribes listed in table 10 exhibit an identical development of equations, with the exception that half of them do not limit sibling terms to parallel cousins. This common basis for the equations of sixteen widespread tribes is rather puzzling. It at first suggests diffusion from the Penutian center. This is likely enough for Shasta, Maidu, Yukian, and the four Athabasean groups, but is hardly the case with the Southern California Shoshoneans and the Northern Diegueño. The phenomena there may well represent an independent and convergent development.

The three aberrant groups of the nineteen, namely, Tübatulabal, Eastern Mono, and Yahi, present as many schemes, as reference to the table will show; all of which suggests that the determining factors have not been identical with those which operated in the other sixteen tribes.

Our discussion of sister-in-law marriage has led us far. We started to examine into the results of a well-nigh universal marriage custom. We have ended by finding that the maximum results of this well-nigh universal custom seem to gravitate to a single linguistic family—Penutian—and to a single culture area. What is the inference to be drawn from this result? To my mind the inference is this: The psychic tendency in the Penutian languages is toward simplicity in kinship systems. Sister-in-law marriage affords a ready avenue to carry out this simplification in a logical manner.

Before concluding let us turn once more to group exogamy as a possible explanation of our seventeen equations. I can imagine the proponents of group exogamy saying: "Is it not possible that the exogamous moieties of the Sierra Miwok and Yokuts are simply vestiges of a former widespread Penutian moiety organization which is really responsible for the seventeen equations?" My reply to this possible argument in favor of group exogamy versus sister-in-law marriage is that the evidence points to a Southwestern origin for Californian group exogamy, and there is no evidence to indicate that it ever extended north of the Northern Miwok. Yet, again, the proponents of exogamy might say that the kinship equations arose among the exogamous Miwok and Yokuts and spread to other groups which lacked group exogamy. This is possible, but hardly likely, since the maximum number of equations occur among the Southern Wintun, who are without group exogamy. If Miwok group exogamy is the ultimate determinant, and diffusion to the Southern Wintun only secondarily responsible, why should the terminological equations come to full flower among the non-exogamous Wintun instead of among the exogamous and dichotomous Miwok? The theories which it is necessary to evolve to make group exogamy fit the Californian data point to the weakness of group exogamy as a determinant of Californian kinship systems.

Although the levirate and wife's sister marriage seem responsible for the equating of parallel cousins to siblings, they certainly cannot be directly responsible for the equating of cross-cousins to siblings, which phenomenon occurs in nineteen of the tabulated tribes.<sup>94</sup> Of course it is entirely possible that, once the levirate had operated to equate parallel cousins to siblings, it required but a second step, or extension of the idea, to equate cross-cousins to siblings. The absence

<sup>94</sup> Western Mono, Hupa, Whilkut, Lassik, Sinkyone, Kato, Wailaki, Yurok, Karok, Achomawi, Lutuami, Southern Maidu, Eastern Mono, Tübatulabal, Yauelmani, Yaudanchi, Huchnom, Yuki, Coast Yuki.

of the levirate among the Yuma would seem to be correlated with the use of special terms for first cousins. But, on the other hand, the Wiyot, who have the levirate, also employ a special term, instead of sibling terms, for first cousins.

The equating of parallel cousins to siblings is after all the most widespread of the several equations which have been listed as possible results of the levirate and wife's sister marriage. Yet why should these two marriage customs make themselves felt more frequently in a class of relatives three steps removed from the speaker rather than in groups but two steps removed? The very fact that parallel cousins are three-step relatives may in part account for their designation by sibling terms, for the invention of special terms for three-step relatives is comparatively rare and undoubtedly is something of a strain upon the nomenclatorial resources of a language. Aiding and abetting this tendency not to invent new terms for three-step relatives come the levirate and wife's sister marriage, which furnish a logical reason for equating parallel cousins to siblings.

#### WIFE'S-BROTHER'S-DAUGHTER MARRIAGE, GROUP EXOGAMY, AND DESCENT

##### Map 27

Although marriage to the wife's brother's daughter is of equal theoretical interest as a kinship determinant, our data as to the extent of the practice are in a sorry state. It is reported for the following groups, either during the wife's lifetime or following her death: Yauelmani, Central Miwok, Southeastern Pomo, Central Pomo, Northern Pomo, Western Mono. The Achomawi stated that the wife's brother's daughter was married only in lieu of the dead wife's sister. The Tolowa said that marriage to the wife's niece, either fraternal or sororal, was practiced in order to replace a dead wife, especially one of two sister wives; a niece thus substituted was often an infant. The Yaudanchi denied the practice of wife's brother's daughter marriage altogether. Unquestionably the custom has a much wider vogue in central California than is shown by the above data. In a preceding paper dealing with the Central Miwok<sup>95</sup> I have shown that the custom of marriage of a man to his wife's brother's daughter and certain features of the Miwok kinship system appear to stand in the relation of cause and effect.

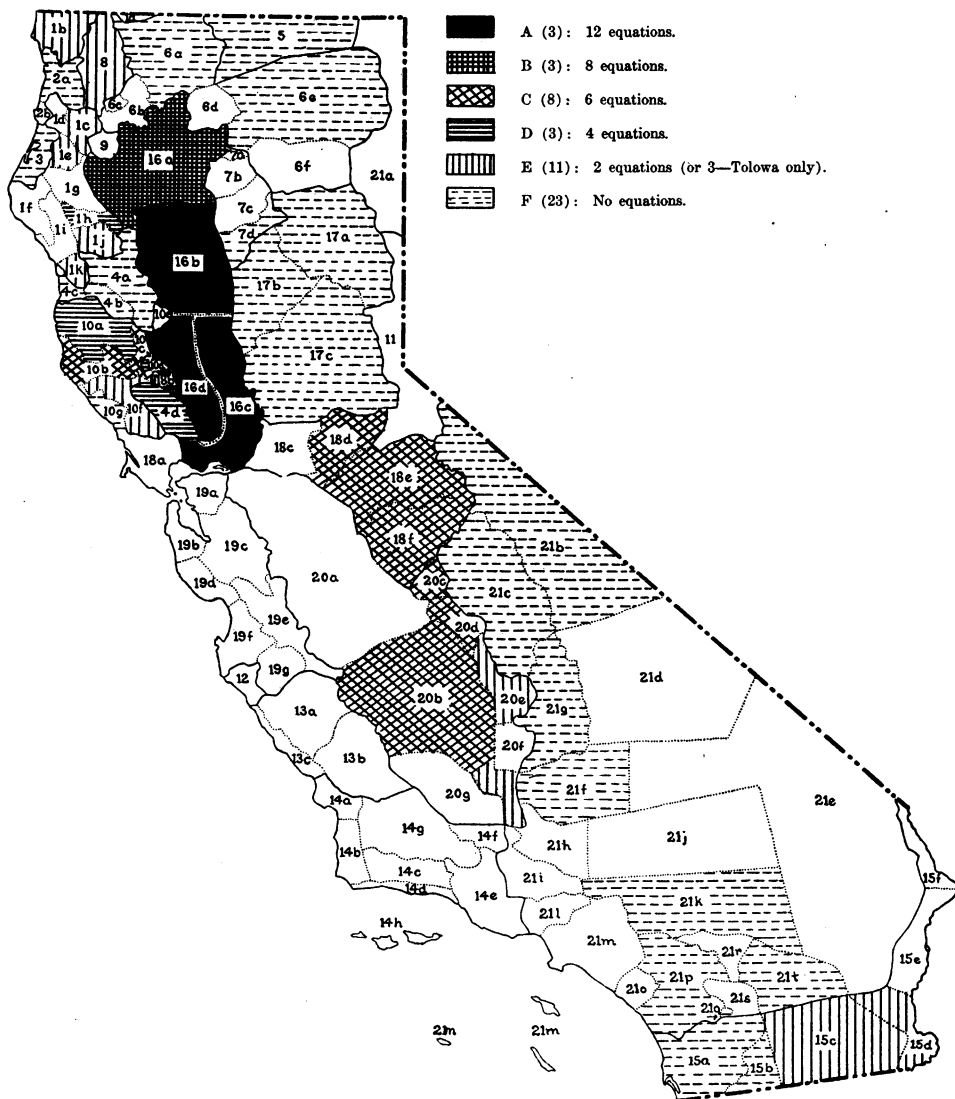
<sup>95</sup> Miwok Moieties, present series, XII, 185, 186, 1916.



The kinship features which seem to be the result of this form of marriage may be stated in the form of terminological equations:

#### DIRECT RESULTS

1. Mother's brother's daughter equals mother, step-mother, or mother's sister.
2. Woman's father's sister's son or daughter equals son or daughter, step-son or step-daughter, or sister's son or daughter.
3. Mother's brother's son equals mother's brother.
4. Man's father's sister's son or daughter equals sister's son or daughter.

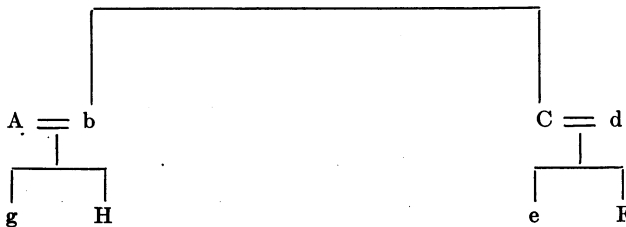


Map 27.—The influence of wife's brother's daughter marriage as indicated by terminological equations.

## REFLEX RESULTS

5. Father's sister equals older sister.
6. Woman's brother's child equals sibling.
7. Father's sister's husband equals sister's husband.
8. Wife's brother's child equals wife's sibling.
9. Mother's brother equals grandfather.
10. Man's sister's child equals grandchild.
11. Mother's brother's wife equals grandmother.
12. Husband's sister's child equals grandchild.

Before proceeding to the distribution of these terminological equations I shall first indicate briefly to the reader, with the aid of a diagram, how these twelve equations may result from the marriage of a man to his wife's brother's daughter. I have numbered the explanatory statements to correspond with the terminological equations. In the following diagram capital letters indicate males, small letters females.



1. From the standpoint of *g* and *H*, *e* stands in the relation of potential mother, step-mother, or mother's sister, because she may become the wife of their father *A*.
2. Conversely, *e* calls *g* and *H* (her father's sister's children) offspring, step-children, or sister's children, because by her marriage to their father *A* (her own father's sister's husband) she may become their potential mother, step-mother, or mother's sister.
3. From the standpoint of *g* and *H*, *F* stands in the relation of mother's brother since his sister *e*, by marriage to their father *A*, becomes their potential mother, step-mother, or mother's sister.
4. Conversely, *F* calls *g* and *H* his sister's children because his sister *e*, by her marriage to their father *A*, becomes their potential mother, step-mother, or mother's sister.
5. Viewed from the standpoint of *F*, *e* (his sister) and *b* (his father's sister) are the same, since both may become the wives of *A*. Their functions are the same: both are mothers of *A*'s children whom *F* designates as sister's children. Hence *b* is called older sister by *e* and *F*. In many tribes she would be thus designated as sister by any woman who becomes her co-wife; hence *e* who becomes her co-wife has this custom as well as consanguinity as reasons for calling her older sister. Naturally *F* follows suit.
6. Conversely, and for the same reasons, *b* designates her brother's (*C*'s) children as younger siblings.

7. Since father's sister is equated to older sister as shown in 5 and 6, father's sister's husband is naturally designated as sister's husband.
8. Conversely, he calls his wife's brother's children as he does his wife's siblings. Actually, if he marries his wife's brother's daughter, her siblings become his siblings-in-law.
9. In the matter of equating mother's brother to grandfather the native line of reasoning may have been as follows: Since mother's brother's daughter equals mother or mother's sister, her father (the speaker's mother's brother) stands also in the relation of grandfather to the speaker.
10. Conversely, a man's sister's child is designated as grandchild as well as nephew-niece.
11. Since mother's brother equals grandfather, mother's brother's wife equals grandmother.
12. Conversely, a woman denotes her husband's sister's child as grandchild.

Once it becomes established that mother's brother's son is called mother's brother, it is but logical, although perhaps not always the case, that all male descendants through males should be similarly designated, and that all female descendants through males should be designated as mother's sister (or mother). That is, if mother's brother is called *ape* (Southern Wintun) and his son is called *ape*, it follows naturally that the mother's brother's son's son and all male descendants through males are called *ape*. If we admit the first equation, mother's brother's son equals mother's brother, all the others follow as a matter of course. The female descendants through males are naturally therefore equated to mother's sister or mother. The hypothesis of moiety alignment invoked by Dr. Robert H. Lowie<sup>96</sup> is clearly not necessary to explain features which might follow as a logical consequence of the primary terminological equation. Furthermore, there are eleven Californian tribes with the kinship feature in question, yet without exogamous groups of any sort.

Of the fifty-two tribes examined in table 11, twenty-four are entirely without the kinship equations which might result from marriage to the wife's brother's daughter. The Southeastern, Southwestern and Central Wintun, on the other hand, have all of the resultant equations. As we go outward from this center the manifested traits decrease in number, as map 27 nicely shows.

In California, at least, the connection of the above kinship traits with group exogamy, and more particularly with group exogamy on a dual basis, is not apparent. The focal center of the complex of traits which result from this form of marriage lies among the Southern and Central Wintun of the Sacramento valley, neither of whom have moieties or group exogamy in any other form. The three groups (Lake

<sup>96</sup> *Culture and Ethnology* (New York, Douglas C. McMurtrie, 1917), 159.

TABLE 11

OCURRENCE OF TWELVE TERMINOLOGICAL EQUATIONS RESULTING FROM MARRIAGE  
TO THE WIFE'S BROTHER'S DAUGHTER

	1	2	3	4	5	6	7	8	9	10	11	12	Total
Exogamous moieties, no clans:													
Southern Miwok.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Central Miwok.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Northern Miwok.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Tachi.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Gashowu.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Chukchansi.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Non-exogamous moieties, subdivided:													
Western Mono.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Exogamous moieties, localized clans:													
Serrano.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Desert Cahuilla.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Cupeño.....	0	0	0	0	0	0	0	0	0	0	0	0	....
No moieties, localized exogamous clans:													
Luiseño.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Northern Diegueño.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Southern Diegueño.....	0	0	0	0	0	0	0	0	0	0	0	0	....
No moieties, exogamous clans:													
Yuma.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Kamia.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Cocopa.....	0	0	0	0	0	0	0	0	0	0	0	0	....
No group exogamy:													
Hupa.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Whilkut.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Tolowa.....	0	0	0	0	x	0	x	x	0	0	0	0	3
Lassik.....	0	0	0	0	x	x	x	x	0	0	0	0	4
Kato.....	0	0	0	0	x	x	0	0	0	0	0	0	2
Wailaki.....	0	0	0	0	x	x	0	0	0	0	0	0	2
Wiyot.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Yurok.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Karok.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Shasta.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Achomawi.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Lutuami.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Yahi.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Northwestern Maidu.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Northeastern Maidu.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Southern Maidu.....	0	0	0	0	0	0	0	0	0	0	0	0	....
No group exogamy:													
Eastern Mono.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Tübatulabal.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Kawaiisu.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Yauelmani.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Yaudanchi.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Lake Miwok.....	x	x	x	x	0	0	x	x	0	0	x	x	8
Southeastern Wintun.....	x	x	x	x	x	x	x	x	x	x	x	x	12
Southwestern Wintun.....	x	x	x	x	x	x	x	x	x	x	x	x	12
Central Wintun*.....	x	x	x	x	x	x	x	x	x	x	x	x	12
Northern Wintun.....	x	x	x	x	0	0	0	0	x	x	x	x	8
Southeastern Pomo.....	x	x	x	x	0	0	x	x	0	0	x	x	8
Eastern Pomo.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Central Pomo.....	x	x	x	x	0	0	x	x	0	0	0	0	6
Northern Pomo.....	x	x	x	x	0	0	0	0	0	0	0	0	4
Southwestern Pomo.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Southern Pomo.....	0	0	0	0	0	0	x	x	0	0	0	0	2
Wappo.....	0	0	0	0	x	x	x	x	0	0	0	0	4
Huchnom.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Yuki.....	0	0	0	0	0	0	0	0	0	0	0	0	....
Coast Yuki.....	0	0	0	0	0	0	0	0	0	0	0	0	....

\*Equations 11 and 12 are hypothetical as no data were secured.

Miwok, Northern Wintun, and Southeastern Pomo) which, next in order, manifest two-thirds of the equations have neither moieties nor group exogamy in any other form. All three, however, are in contact with the Southern and Central Wintun. Of the eight groups which possess six (or exactly one-half) of the twelve terminological equations, two are Pomo groups (Eastern and Central) without group exogamy. The six others are Sierra Miwok and Yokuts groups with exogamous moieties. By virtue of all of the data, I do not see how it is possible to hold that exogamy is responsible for the equations in these six groups. Four other groups with moieties (Western Mono, Serrano, Desert Cahuilla, Cupeño) are without trace of the twelve terminological equations.

The twenty-four groups, including the four with moieties just mentioned, which are without trace of the twelve equations lie chiefly outside of the Central California culture area, with the exception of such aberrant groups as the Maidu and Southwestern Pomo. More particularly, the tribes with from twelve to four of the equations all lie within or upon the fringe of the central California Valley culture area, as defined on page 202.

In listing the twelve equations on page 248 I distinguished direct and reflex results of the marriage of a man to his wife's brother's daughter. Turning to table 11, it is to be noted that the direct results (numbered 1 to 4) are manifested among fifteen groups. I look upon these fifteen as representing the core of the complex. Inspection shows them to be eleven Penutian (Miwok, Yokuts, Wintun) and four Pomo groups. Clearly we are dealing again with a primarily Penutian institution so far as California is concerned.

The presence of two of the reflex traits, equating of father's sister's husband to brother-in-law and its correlate, in the remote northwestern and southeastern corners of the state is, I believe, not due so much to wife's-brother's-daughter marriage as it is to adherence to the custom of denoting all spouses of uncles and aunts by terms for other relatives by marriage. The groups to which this remark applies are the Yuma, Kamia, Hupa, Whilkut, Tolowa, and Karok.

The discernible factors responsible for the foregoing complex of terminological equations which reaches its maximum of expression in the Southern and Central Wintun kinship systems I believe to be as follows:

1. The customary marriage, either polygynous or post-mortem, of a man to his wife's brother's daughter.

2. The psychic tendency toward simplicity and few terms displayed by Penutian kinship systems, especially Wintun. This simplifying tendency has apparently seized upon factor 1 as an avenue for logical simplification.

3. Diffusion of the marriage institution, the resultant terminology, or both.

4. Patrilinear reckoning, either independent of or in conjunction with, group exogamy, of which the four direct terminological equations are in part the result.

The first factor does not require further discussion, except to remark that its terminological importance, in my belief, has been underestimated by Dr. Lowie in his recent book, "Culture and Ethnology."<sup>97</sup>

Factor 2, as to the Penutian tendency toward simplicity, is next in line for remark. This tendency toward simplicity is particularly apparent when Penutian systems are contrasted with others as to the number of terms employed. In the case of Central and Northern Wintun (see table 12) there has apparently been an increase of terms.

TABLE 12

## COMPOUNDING OF CENTRAL AND NORTHERN WINTUN KINSHIP TERMS

	<i>Southern</i>	<i>Central</i>	<i>Northern</i>
Mother's brother.....	ape	teupo	kiye
Grandfather.....	ape	teupo-soko	kiye-tcibet
Mother's brother's wife.....	amake	.....	puta
Grandmother.....	amake	.....	puta-tcibet
Son.....	de	ku	ku
Man's brother's son, woman's sister's son.....	de	ku	ku-de
Daughter.....	de	bitcen	bitcen
Man's brother's daughter, woman's sister's daughter.....	de	bitcen	bitcen-de

As we proceed northward from the Southern Wintun there is a clear tendency to increase the number of terms, not by inventing or utilizing brand new terms, but by suffixing certain elements to the stems already in use. This seems to indicate that the former Wintun system was a very simple one, probably similar to that of the Southern Wintun of today. The example of neighbors has very likely brought about the increase of terms in the north. Of course the reverse possibility must not be overlooked, to wit: that Southern Wintun has discarded suffixes that were formerly a pan-Wintun possession. Which ever way the matter is regarded, it is testimony of Wintun simplicity.

<sup>97</sup> Douglas C. McMurtrie, 1917, New York.

Diffusion, which I have cited as factor 3, scarcely needs an argument in its support. Map 27 speaks for it.

Patrilinear reckoning as a factor molding kinship systems has hardly received the attention it deserves. The reason for this neglect is clear. Unilateral reckoning, either patrilinear or matrilinear, is a correlate of group exogamy, and as such has been eclipsed as a kinship determinant. In California, however, are to be found both patrilinear and matrilinear tribes without group exogamy, but with the two classifications of cross-cousins which Dr. Lowie attributes respectively to patrilinear and matrilinear exogamous groups.<sup>98</sup> In patrilinear groups this classification consists of identifying mother's brother's son and all male descendants through males with mother's brother, mother's brother's daughter and all female descendants of mother's brother through males with mother or mother's sister. In matrilinear groups the reverse procedure is followed. Father's sister's daughter and all female descendants through females are classed with father's sister, father's sister's son and all male descendants of father's sister through females with father or father's brother. Californian tribes without group exogamy which follow the patrilinear scheme are the Plains Miwok, Coast Miwok, Lake Miwok, Southeastern Wintun, Southwestern Wintun, Central Wintun, Northern Wintun, Northern Pomo, Central Pomo, Eastern Pomo, Southeastern Pomo. The tribes following the matrilinear scheme are the Southern Pomo and Wappo. I consider these thirteen non-exogamous tribes of deep significance in connection with Dr. Lowie's theory that group exogamy is the cause of the two peculiar forms of cross-cousin terminology under discussion. These non-exogamous Californian tribes clearly indicate that it is not group exogamy that is the determinant, *but unilateral reckoning*.<sup>99</sup> The association, in our minds, of unilateral reckoning and group exogamy has clearly obscured the action of the former as a determinant. As to the exact *modus operandi* of unilateral descent in affecting cross-cousin terminology, I must plead ignorance except in so far as we may consider a man's preemptive right to his wife's brother's daughter as one of the attributes of patrilinear

<sup>98</sup> Culture and Ethnology, 150-159.

<sup>99</sup> The facts concerning the thirteen non-exogamous tribes cited above substantiate the opinion of Dr. Kroeber, expressed as follows in *Zuni Kin and Clan*, Anthr. Papers, Am. Mus. Nat. Hist., xviii, 86, 1917: "I should be inclined to connect the use of parent-child terminology for cross-cousinship rather with unilaterality of descent rather than with clan exogamy, holding the latter to be perhaps a common but not necessary development, and an overlying development, of the former."

reckoning and a direct cause of the patrilinear cross-cousin terminology.<sup>100</sup> The matter of how unilateral reckoning operates is clearly one requiring data from all tribes possessing the peculiar cross-cousin terminologies which seem to be the result of it.

#### CROSS-COUSIN MARRIAGE

It is with a timorous feeling that I approach the matter of cross-cousin marriage, as my data are very meager and derived in large measure by direct questioning and not by the genealogical method. The Central Miwok and Southern Wintun statements are alone supported by concrete examples. There are, however, two other fairly reliable criteria: (1) a speech taboo between a man and his mother's brother's wife as between a man and his mother-in-law, and (2) the employment by a woman of the terms for children-in-law for her husband's sister's children. These two criteria are significant since the only authenticated instances of cross-cousin marriage are unilateral and are restricted to a man and his mother's brother's daughter. The following tabulation briefly presents my data.

TABLE 13  
CROSS-COUSIN MARRIAGE

<i>Tribe</i>	<i>Unilateral cross-cousin marriage</i>	<i>Speech taboo with man's mother's brother's wife</i>	<i>Husband's sister's children = children-in-law</i>	<i>Bilateral cross- cousin marriage</i>
Tübatulabal .....				x
Western Mono.....				x
Tachi.....		x		x
Chukchansi.....		x		
Southern Miwok....	x	x	x	
Central Miwok.....	x	x	x*	
Northern Miwok....	x	x	x	
Southern Wintun...	x			
Southeastern Pomo	x			
Central Pomo.....	x			
Coast Yuki.....	x			

\*Present series, XII, 190, footnote 21, 1916.

To begin with, we shall rule out of the discussion the hearsay cases of bilateral cross-cousin marriage among the Tübatulabal, Mono,

<sup>100</sup> I have elsewhere pointed out that the Miwok form of cross-cousin marriage (i.e., to the mother's brother's daughter) is probably a manifestation of patrilinear reckoning. See *Miwok Moieties*, present series, XII, 191, 1916; also present paper, pp. 164, 254.



and Tachi, and also the report for the geographically isolated Coast Yuki. This leaves us eight Penutian (including Tachi) and Pomo tribes, all in the central California Valley area, and all practicing unilateral cross-cousin marriage. All my readers will admit that the three Miwok cases are established beyond a peradventure.<sup>101</sup> The two Yokuts, and the one Wintun, cases I feel sure of, but I should like further proof before I accept the two Pomo cases, although I think that the probabilities are in favor of their correctness. Two other Pomo groups, Southern and Southwestern, denied the presence of cross-cousin marriage. This was to be expected, however, as cross-cousin marriage in California is apparently closely correlated with patrilinear institutions, and the two Pomo groups in question stand apart from the distinctively patrilinear groups of Central California.

Moiety organization may have played a part in the origin of cross-cousin marriage, but personally I am inclined to believe that the custom of wife's-brother's-daughter marriage and patrilinear reckoning are responsible for it.<sup>102</sup> This hypothetical origin is discussed in detail in a previous paper.<sup>103</sup> The secondary rank of cross-cousin marriage as compared with wife's-brother's-daughter marriage is there demonstrated and is still further demonstrated in the preceding section of the present paper, wherein the apparently enormous influence of wife's-brother's-daughter marriage upon kinship terminology has been dwelt upon at length. The but slight influence of cross-cousin marriage upon Californian kinship terminology as compared with its influence in some other parts of the world is an argument in favor of the relatively recent and secondary origin of this form of marriage in California. Briefly, the hypothetical secondary origin as set forth in my preceding paper is this: The right of a man to marry his wife's brother's daughter was relegated to his son, who thus married his father's wife's brother's daughter, in other words, his own cross-cousin (mother's brother's daughter). In conclusion I would emphasize the fact that Californian cross-cousin marriage is clearly a Penutian institution.

<sup>101</sup> Over forty years ago cousin marriage was reported for the Miwok. See Stephen Powers, *Tribes of California*, U. S. Geogr. Geol. Surv. Rocky Mt. Region, Contributions to North American Ethnology, III, 348, 1877.

<sup>102</sup> In explanation of the alleged former Western Mono cross-cousin marriage, particularly marriage to the mother's brother's daughter, an informant placed the initiative with the father of the girl, who he said might give his daughter to a wealthy cousin of the girl in order to get for himself the benefit of her cousin's wealth. Cross-cousin marriage is at present considered wrong by the Western Mono.

<sup>103</sup> Miwok Moieties, present series, XII, 189-193, 1916.

## OTHER FORMS OF MARRIAGE

At least two other forms of marriage which might affect kinship terminology should be noted. Little is known of their distribution, so little in fact that it would be extremely hazardous to state that certain kinship features, which would logically result from such marriages and which are present in California, are the result of these forms of marriage. Clearly they are subjects for future investigation.

Exchange marriage,<sup>104</sup> that is, the marriage of a brother and a sister to a sister and a brother, might bring about the following equations: father's sister's husband equals mother's brother, mother's brother's wife equals father's sister, daughter-in-law's brother equals son-in-law, son-in-law's sister equals daughter-in-law, and so on.

Marriage of man to a woman and her daughter by a previous marriage is reported for the Yurok,<sup>105</sup> and probably occurs among other northwestern tribes. Once its distribution in California is worked out, it may be found to have left an impress upon the kinship nomenclature. It may be responsible for the absence of the term daughter in Californian Athabaskan dialects, in all of which man's daughter is differentiated terminologically from woman's daughter.

## DEATH, DIVORCE, AND ILLEGITIMATE MARRIAGE

Among many groups different terms are employed or ordinary terms altered following the death of a near or connecting relative. This brief section aims to list the tribes with these customs. The detailed account for each tribe will be found with the respective terminologies in the earlier portion of this work. The distribution of these customs is largely northern and southern Californian, rather than central, as the following list shows: Tolowa, Yurok, Karok, Shasta, Yahi, Lutuami, Kawaiisu, Tübatulabal, Serrano, Luiseño, Mohave, Cocopa, Southern Diegueño, Northern Diegueño, Yauelmani, Yaudanchi, Paleuyami, Tachi, Wappo. Absence of the customs was asserted by informants for the following tribes: Hupa, Lassik, Sinkyone, Wailaki, Kato, Wiyot, Achomawi, Northwestern Maidu, Northeastern Maidu, Desert Cahuilla, Cupeño, Yuma, Kamia, Central Miwok, Lake Miwok, Northern Wintun, Southeastern Pomo, Central Pomo, Northern Pomo, Southwestern Pomo, Southern Pomo, Huchnom, Yuki, Coast

<sup>104</sup> Reported for the Yurok by A. L. Kroeber. Also recorded by me for the Yaudanchi.

<sup>105</sup> *Fide* A. L. Kroeber.

Yuki. Plainly the distribution of the traits in question is sporadic except for two compact areas, one in northwestern and the other in south central California.

In northwestern California are found special circumlocutory terms of reference for dead relatives. This trait is reported for the Tolowa, Hupa, Yurok, Karok, and Shasta.

The customs referred to impress me as excrescences which have grown on the various terminologies rather than integral parts of each. Much the same remark is applicable to the Northwestern Californian cases in which divorce and illegitimate marriage are recognized in the terminology. Usually, if divorce produces any effect at all, it is merely a cessation of the use of terms of affinity as among ourselves. In northwestern California, however, a special affix is sometimes added to the term of affinity to indicate that the connecting relatives are divorced. There, too, a very similar custom obtains in connection with wife purchase. No terms of affinity are employed or an affix meaning "no relative" is added to the terms in case of an illegitimate marriage, that is, one in which marriage is consummated without the husband making the requisite payment.

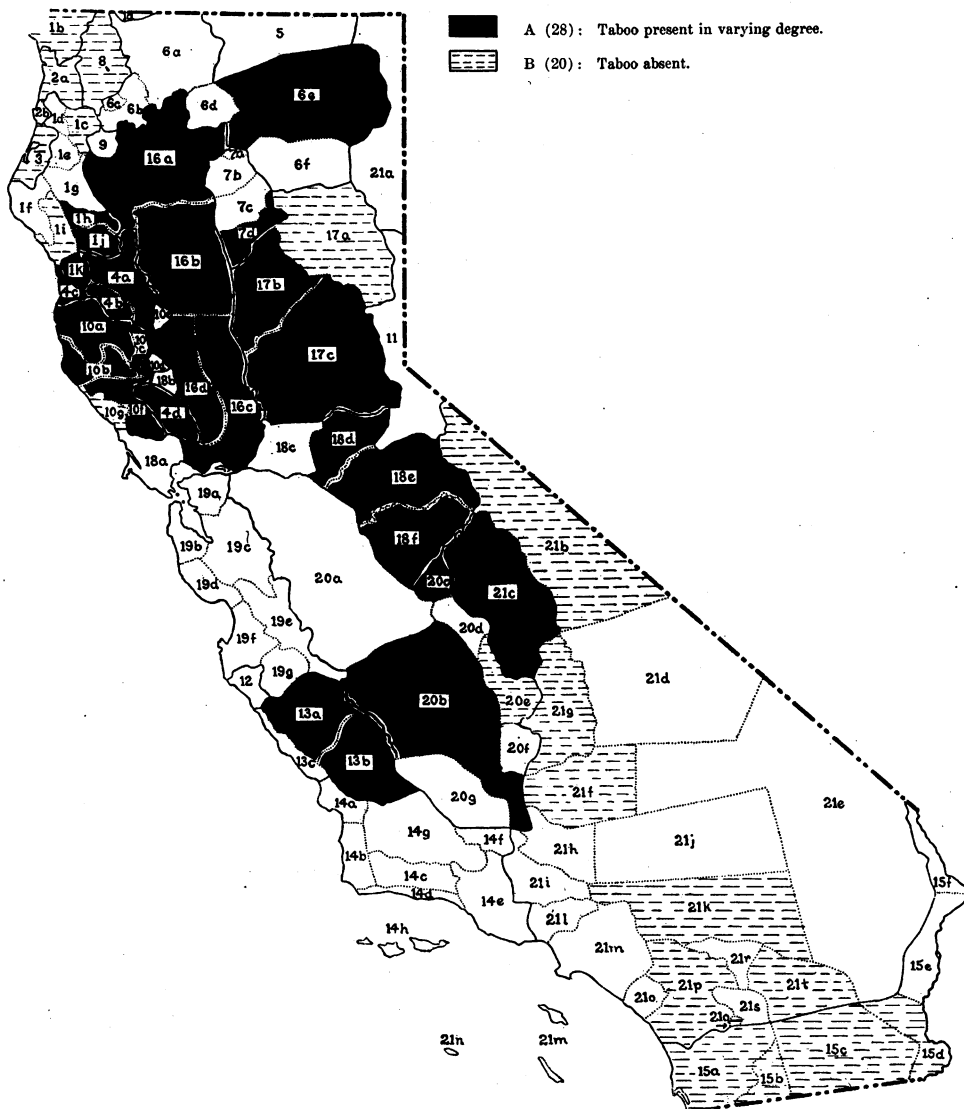
#### MOTHER-IN-LAW TABOO

##### Map 28

The available data on the mother-in-law taboo in California are far from satisfactory. But in spite of their meagerness it is apparent that there is a considerable range of customs which may be included under this head. The covering of the face by the mother-in-law at the approach of the son-in-law may perhaps be regarded as the most pronounced manifestation of the taboo. Dual or plural terms of address, or mere "bashfulness," when occurring alone, are apparently weak manifestations of the same principle. It seems very likely, although the insufficient data do not warrant the assertion, that the father-in-law taboo is nearly coextensive with the mother-in-law taboo.

Absence of the taboo was asserted by informants for the following twenty-one tribes, chiefly of northwestern and southern California: Tolowa, Hupa, Sinkyone, Yurok, Wiyot, Karok, Northeastern Maidu, Southwestern Pomo, Eastern Mono, Yaudanchi, Tübatulabal, Kawaiisu, Serrano, Desert Cahuilla, Cupeño, Luiseño, Northern Diegueño, Southern Diegueño, Kamia, Cocopa.

The mother-in-law taboo is baldly reported, without detail as to specific actions, for the following tribes: Southern Maidu, Salinan,<sup>106</sup> Tachi, Chukchansi, Southern Miwok, Southeastern and Southwestern



Map 28.—The mother-in-law taboo.

Wintun, and Central Pomo. The father-in-law taboo is reported without specific detail for the Tachi, Southeastern and Southwestern Wintun, and Central Pomo.

<sup>106</sup> J. Alden Mason, *The Ethnology of the Salinan Indians*, present series, x, 164, 1912.

Table 14 shows the occurrence of the various traits which may be regarded as manifestations of the taboo. The following actions are considered:

1. Covering of face.
2. Averting of face.
3. Not touching.
4. Not talking.
5. Not handing food or other objects.
6. Not eating together.
7. Turning aside when about to meet.
8. Not laughing.
9. Speech through third person.
10. Dual or plural in address.
11. "Bashful."
12. Taboo only when newly wed.

In the table these twelve traits are listed horizontally across the top by convenient catch words: 1 covering, 2 averting, 3 touching, 4 talking, 5 handing, 6 eating, 7 turning, 8 laughing, 9 third, 10 plural, 11 bashful, 12 newly.

TABLE 14  
MOTHER-IN-LAW TABOO

<i>Tribe</i>	<i>Covering</i>	<i>Averting</i>	<i>Touching</i>	<i>Talking</i>	<i>Handing</i>	<i>Eating</i>	<i>Turning</i>	<i>Laughing</i>	<i>Third</i>	<i>Plural</i>	<i>Bashful</i>	<i>Newly</i>
Lassik.....					x					x	x	
Wailaki.....		x								x	x	
Kato.....		x							x			
Achomawi.....		x			x					x		
Yahi.....		x		x								
Northwestern Maidu.....	x	x		x		x		x				
Western Mono.....										x		
Yauelmani.....										x		
Central Miwok.....		x	x	x					x			
Northern Miwok.....		x	x	x			x			x		
Central Wintun.....				x		x						
Northern Wintun.....			x	x			x					
Eastern Pomo.....										x	x	
Northern Pomo.....	x											
Huchnom.....										x	x	x
Yuki.....		x					x			x	x	
Coast-Yuki.....				x	x							

Undoubtedly the use of dual and plural in address is much more widespread than table 14 shows. A similar statement would probably be true of a number of the other twelve traits. Since the data at hand are in large measure general rather than specific, it seems a waste of

time to attempt a discrimination as to intensity of the taboo in plotting its distribution. Map 28 therefore discriminates only between complete absence of the taboo and its presence in some form or other.

Map 28 makes clear the fact that the mother-in-law taboo in all of its manifestations is essentially a trait of the Central California culture area. It is spread alike over both mountain and valley tribes. It is totally absent, however, from the Northwestern and Southern California culture areas. Lack of definite details prohibits the fixing of the focal center of the complex with certainty, but the development of the taboo, judging from data in hand, seems to be greatest among the Maidu and Miwok of the Sierra Nevada. There is nothing to indicate that it arose in and spread from the Sierra Nevada region, however. Yet again, any attempt to correlate it with a particular type of parent-in-law classification proves futile.

In the following pages the detailed data concerning the mother-in-law taboo are presented. These data are drawn from various sources.

*Lassik*.—The mother-in-law taboo was operative. If speech was absolutely necessary, a dual form of address was employed. Parents-in-law and children-in-law were "bashful" in each other's presence. They would not hand food to each other, but laid it down.

*Wailaki*.—The mother-in-law taboo is enforced among the Wailaki. In addition parents-in-law and children-in-law are bashful in each other's presence and employ a dual in address. Corroborative of the preceding information is that volunteered by Wailaki Jim to Dr. Goddard in 1906: "The father-in-law never sees the daughter-in-law's face. She sits with her face turned away. Some one tells her when the father-in-law is coming and she gets out of the way; mother-in-law the same way."<sup>107</sup>

*Wailaki, Kato*.—"A man does not directly address or face his mother-in-law. If she enters a house where he is, he turns his face aside, and he speaks to her only through the medium of his wife. The same relation exists between a woman and her father-in-law."<sup>108</sup>

*Achomawi*.—The mother-in-law taboo prevailed, according to all three informants interviewed. If a man must address his mother-in-law, he used the second person plural pronoun *mictu*. This custom was reciprocal and was furthermore extended to the mother-in-law's sister and the son-in-law's brother. Similarly a woman addressed her father-in-law and his brothers in the plural.

<sup>107</sup> P. E. Goddard, unpublished notes.

<sup>108</sup> W. E. Myers, manuscript.

"A man was not permitted to look too closely at his mother-in-law, nor could either accept anything directly from the hand of the other. They were permitted to converse casually, and they might even be in the house alone together without transgressing any law of custom. The same rules applied to a woman and her father-in-law."<sup>109</sup>

*Yahi.*—A general term classifies such parents-in-law and children-in-law "as must not be spoken to or looked at," for the mother-in-law taboo is operative among the Yahi. The relatives included in the taboo are: women's son-in-law and woman's son-in-law's brother, man's mother-in-law and man's brother's mother-in-law, man's daughter-in-law and man's daughter-in-law's sister, woman's father-in-law and woman's sister's father-in-law. When a tabooed relative is referred to a distinctive suffix is added to the term, a custom also practiced by the Yuki. The suffix is also added to the terms for son-in-law's sister and daughter-in-law's brother as spoken respectively by a man and by a woman.<sup>110</sup>

*Lutuami.*—"Some men refrained from conversation with their mothers-in-law on account of their wives' jealousy."<sup>111</sup>

*Northwestern Maidu of the Valley.*—"The ordinary customs in regard to the mother-in-law were in force, mother-in-law and son-in-law not looking at or speaking to each other. The woman always covered her head when she met her daughter's husband."<sup>112</sup>

*Northwestern Maidu of the Mountains.*—The mother-in-law taboo was said to have been operative in the vicinity of Mooretown, Butte county.

"In the presence of her son-in-law or father-in-law a woman covered her eyes with a piece of deerskin, and held no conversation with him. Neither ate in the presence of the other. That this was simply a question of proper social formality is indicated by the fact that similar relations existed between a man and his father-in-law; as well as by the fact that a woman sometimes teased her husband by tickling him and otherwise trying to make him laugh in the presence of his mother-in-law."<sup>113</sup>

*Western Mono.*—The mother-in-law taboo was in force. When address was necessary it was in the plural.

<sup>109</sup> W. E. Myers, manuscript.

<sup>110</sup> Edward Sapir, *Yana Terms of Relationship*, present series, XIII, 165, 172, 1918.

<sup>111</sup> W. E. Myers, manuscript.

<sup>112</sup> Roland B. Dixon, *The Northern Maidu*, Bull. Am. Mus. Nat. Hist., XVII, 239, 1905.

<sup>113</sup> W. E. Myers, manuscript.

*Eastern Mono*.—"Conversation between a man and his mother-in-law was not prohibited, but it was required to be serious and respectful."<sup>114</sup>

*Paviotso, Walker River, Nevada*.—"Conversation was restricted to necessary and serious topics, and even this was generally carried on through the medium of the wife. A man coming home and finding his mother-in-law in the house would leave it at once; and if any conversation was necessary he would stand outside and say what was required."<sup>115</sup>

*Yauelmani*.—The existence of the mother-in-law taboo was denied, but it was stated that the mother-in-law was addressed in the dual.

*Central and Northern Miwok*.—"A man was not permitted to speak to, nor exchange looks with, nor touch his mother-in-law and the wives of his wife's brothers; and a woman held the same relation toward her father-in-law and the husbands of her husband's sisters."<sup>116</sup>

*Northern Miwok*.—Children-in-law and parents-in-law avoid each other and use the dual in address.

*Central Wintun*.—A species of mother-in-law taboo prevails. A man speaks but little to her and will not eat with her. This latter custom may be but a specific instance of the general practice of old people eating apart from young people. An informant who was familiar with Maidu usage said that the Wintun mother-in-law taboo was not so rigorous as the Maidu.

*Northern Wintun*.—Taboo against a man speaking with mother-in-law and woman with father-in-law operates.

"A man might converse with his mother-in-law, but not touch her nor even pass close to her. If she sat near the door and he wished to depart, he would say, 'Move aside, mother-in-law, I must go out.' There is no evidence of taboo here, it is merely a question of respect; for if a woman had no regard for her son-in-law, thinking him a worthless fellow who would not long remain with her daughter, she did not accord him the honor of insisting upon the observance of this rule."<sup>117</sup>

*Eastern Pomo*.—"The [Eastern] Pomo do not refrain from addressing their parents-in-law in Maidu or Yokuts fashion, nor do they avoid their presence. Instead, they are polite by speaking to them in the plural, and the old people reciprocate. Relatives-in-law of one's own generation are not accorded this deference, but a man will continue the expression of respect to his parents-in-law even after his

<sup>114</sup> W. E. Myers, manuscript.

<sup>115</sup> W. E. Myers, manuscript.

<sup>116</sup> W. E. Myers, manuscript.

<sup>117</sup> W. E. Myers, manuscript.



wife's death. In place of calling his father-in-law by this term of relationship or simply 'thou,' he says to him: *mal butsigi hibekal*, 'ye old-man them.' As this instance shows, some curious logical inconsistencies of grammatical number and person are not shrunk from in the adherence to this practice."<sup>118</sup>

Further Eastern Pomo data recently secured by Dr. Kroeber are to the effect that mother-in-law and son-in-law are a "little bashful" and do not talk much, but there is no shame nor restrictions. The informant contrasted his tribe's customs with the rigorous taboo of the Concow (Northwestern Maidu).

*Northern Pomo.*—Mother-in-law and father-in-law taboo prevailed throughout life. The former kept her face covered in the presence of her daughter's husband.

*Huchnom.*—There was at least a partial and temporary parent-in-law taboo, for parents- and children-in-law were "bashful" in each other's presence for a short time after marriage and until the young couple obtained their own home. The ending -game of the terms of the parent-in-law class is said to be a plural.

*Yuki.*—Parent-in-law speech taboo prevailed among the Yuki. Parents- and children-in-law are reported as "bashful" in each other's presence. The ending -kima on the terms of the parent-in-law class is said to be an ending of respect used when referring to the relatives. It is clearly of same origin as -game in Huchnom, which is said to be a plural.

"Among the Yuki of Round Valley, except those at Eden Valley, the relations of a man with his mother-in-law and of a woman with her father-in-law were rigidly restricted. They avoided each other's presence, and when they were unavoidably in the same place they averted their faces. They never addressed each other."<sup>119</sup>

*Coast Yuki.*—A speech taboo was operative between parents- and children-in-law of opposite sex. Food was not passed, but was laid down.

<sup>118</sup> A. L. Kroeber, manuscript.

<sup>119</sup> W. E. Myers, manuscript.

## PSYCHOLOGY

In some degree this heading is a cloak for ignorance, for under it I have assembled the residuum, the facts which are unexplainable on the basis of diffusion, language, and social customs. Yet in a measure this residuum embraces some of the most fundamental phases of our problem.

In the preceding section on social determinants of kinship systems I have perhaps appeared to stress the idea of social causation rather heavily. By no means, however, do I claim for social factors a rigid determinism. I believe that the complex for each people must be studied and interpreted in the light of that study, not according to some preconceived dogma. Many kinship features are doubtless explainable on a plain, everyday common sense basis.

When a Luiseño woman calls her parent-in-law paternal grandparent, which is what her child also calls that individual, to my mind the chances are ten to one that the case is analogous to our own. In our society a woman with offspring often calls her parents-in-law grandparents, just as her children do. Before the birth of her children the same woman in our society usually calls her parents-in-law loosely father and mother. After the arrival of offspring she gradually adopts the grandparent terms as her child learns to talk. Although not so logically or extensively carried out, this case is roughly analogous to that of certain Southern California Shoshoneans who employ two sets of terms for relatives-in-law, one set pre-issue, the other post-issue, the latter usually descriptive.

In English we have other transitory changes connected with the presence of children in a family. The husband is frequently called daddy, or the wife mother. One of two children is sometimes called brother or sister, the parent employing the terminology which the two children employ between themselves. There must be, in other kinship systems, many analogous cases, some of them crystallized into invariable custom like the Luiseño case, cases which require no startling form of marriage for their explanation, but which could be as readily understood as our own, if we were but familiar with the family life of the group in question.

It is the purpose of the present portion of this work to examine the Californian kinship systems from certain psychological standpoints. First the manifestations of the eight underlying categories of relationship systems will be investigated. Discussion of conceptual

and verbal reciprocity, descriptive terms, symmetry and asymmetry, bifurcation, and other kindred topics will aid in putting the "psychic" factors of kinship systems on a tangible and distributional footing.

#### THE UNDERLYING CATEGORIES

Dr. A. L. Kroeber has succinctly stated eight principles which underlie all relationship systems in his paper on "Classificatory Systems of Relationship."<sup>120</sup> These eight principles or categories are briefly:

1. The difference between persons of the same and of separate generations.
2. The difference between lineal and collateral relationship.
3. Difference of age within one generation.
4. The sex and the relative.
5. The sex of the speaker.
6. The sex of the person through whom relationship exists.
7. The distinction of blood relatives from connections by marriage.
8. The condition of life of the person through whom relationship exists.

The varying extent to which these categories are expressed is correlated with the numerous types of kinship nomenclature. In a given class of relatives we find one tribe ignoring certain categories, others adhering to them. Thus the sections dealing with types of classification (pp. 123 to 192) could just as well be written on the basis of these eight categories, for it is expression or non-expression of a category when one tribe, for example, employs the term grandfather and another distinguishes between paternal and maternal grandfather. A detailed examination of each type of classification hardly seems warranted, as but slight study will make it apparent, to the student who wishes to know, whether a given category is expressed or not expressed.

An examination of the various kinship systems to determine the degree to which each category is expressed will be attempted in the following pages. Dr. Kroeber's eighth category, "the condition of life of the person through whom relationship exists," will be omitted, as the data concerning this category have been discussed under the caption, Death, Divorce, and Illegitimate Marriage. An allied custom, the employment of pre-issue and post-issue terms, resting on the presence or absence of offspring, will be referred to later under the caption, Descriptive Terms.

Of the seven categories to be considered, it is theoretically possible for all but one to be expressed in each and every kinship term. The one which cannot be expressed in each and every kinship term refers to connecting relatives and is therefore applicable only to relatives two or more steps removed from the speaker. Thus it is quite useless

<sup>120</sup> Jour. Royal Anthr. Inst., xxxix, 78, 1909.

TABLE 15  
EXPRESSION OF CATEGORIES IN PERCENTAGES

	<i>Lineal or Generation collateral</i>	<i>Age in generation</i>	<i>Blood or marriage</i>	<i>Sex of relative</i>	<i>Sex of speaker</i>	<i>Sex of connecting relative</i>
Tolowa.....	72	28	9	93	88	40
Hupa.....	58	28	11	86	83	25
Whilkut.....	61	31	11	86	83	25
Lassik.....	65	22	11	54	81	41
Wailaki.....	73	24	12	48	79	42
Kato.....	64	22	11	44	83	42
Yurok.....	76	44	12	65	79	24
Wiyot.....	88	45	0	79	73	15
Karok.....	71	33	10	100	76	21
Shasta.....	63	37	11	86	57	29
Achomawi.....	72	22	14	83	44	17
Yahi.....	74	19	9	88	67	33
Lutuami.....	71	56	13	87	47	36
Northwestern Maidu (Plains).....	70	23	13	73	63	20
Northwestern Maidu (Mts).....	88	18	18	38	68	15
Northeastern Maidu.....	90	29	13	68	71	13
Southern Maidu.....	83	28	14	45	66	21
Northeastern Mono.....	78	24	11	68	59	32
Southeastern Mono.....	87	23	10	59	67	26
Western Mono.....	86	7	14	36	57	21
Kawaiisu.....	100	14	37	44	70	37
Tübatulabal.....	87	21	18	77	64	28
Serrano.....	72	33	26	51	51	33
Desert Cahuilla.....	81	27	25	65	48	31
Cupeño.....	89	22	29	58	47	36
Luiseño.....	81	26	28	56	55	37
Yuma.....	80	56	19	96	63	43
Kamia.....	78	40	24	98	56	31
Cocopa.....	88	44	23	90	81	46
Southern Diegueño.....	85	29	27	63	66	32
Northern Diegueño.....	97	23	28	56	56	26
Yauelmani.....	75	22	11	72	69	22
Yaudanchi.....	73	21	12	76	73	18
Tachi.....	32	30	11	73	76	22
Gashowu.....	22	19	15	70	85	22
Chukchansi.....	21	14	21	69	79	21
Southern Miwok (Pohonichi).....	24	14	21	59	76	10
Southern Miwok (Yosemite).....	32	14	18	75	71	11
Central Miwok (Groveland).....	32	15	15	76	76	26
Central Miwok (Tuolumne).....	31	14	17	74	80	26
Northern Miwok.....	28	16	19	72	78	13
Plains Miwok.....	72	18	18	72	72	11
Lake Miwok.....	30	18	21	67	64	12
Southeastern Wintun.....	28	22	17	44	50	11
Southwestern Wintun.....	28	22	17	44	50	11
Central Wintun.....	24	16	24	44	84	12
Northwestern Wintun (Trinity).....	28	24	16	52	88	16
Northern Wintun (Shasta).....	79	42	12	58	85	9
Northeastern Wintun.....	82	47	12	62	86	12
Southeastern Pomo.....	30	14	16	65	84	24
Central Pomo.....	44	25	17	64	69	17
Northern Pomo.....	25	19	14	67	81	22
Southwestern Pomo.....	75	28	18	55	90	30
Southern Pomo.....	24	13	16	61	84	18
Wappo.....	27	17	39	71	76	12
Huchnom.....	83	17	26	43	77	26
Yuki.....	82	21	24	47	79	18
Coast Yuki.....	71	29	10	74	81	26

to seek for the expression of this category in such terms as father, son, wife, and brother, as these relatives are but one step removed from the speaker. Uncle, grandfather, and brother-in-law are two steps removed; cousin, father's sister's husband, and husband's brother's wife three steps removed.

In a certain sense terms for parallel cousins and cross-cousins indicate the sex, or, better, sex relations, of the connecting relatives; i.e., the sex relation is either male to male or female to female for parallel cousins, and male to female or vice versa for cross-cousins. This point has been ignored, however, and only the absolute sex of the connecting relative has been considered in the analyses of the various kinship systems.

It is obvious that the more terms there are in a kinship system the greater are the possibilities of expressing the various categories.

The materials employed in the categorical analysis of Californian kinship systems presented in table 15 are not all strictly comparable, quite a number of terms having decided shortcomings, particularly lacking collateral extensions of meaning. These shortcomings have been overcome by supplying the missing data through analogy, usually an unsafe procedure. In this case, however, the writer has made no reconstructions that seemed at all doubtful. By thus building up each deficient kinship system it has been possible to compare them all on an equal basis.

It is of interest to note that every category is expressed in every Californian tribe considered except that age in generation is totally lacking in Wiyot. In this regard Wiyot parallels English.

Table 16 shows in percentages the extent to which fifty-eight Californian kinship systems give expression to the seven principal categories manifested in kinship terms. Leaving distribution out of the discussion for the present and considering only variation, we find that the categories range themselves in the following order as to variability:

TABLE 16  
PERCENTAGE VARIATION OF KINSHIP CATEGORIES

	<i>Range of percentage variation</i>	<i>Maximum percentage</i>	<i>Minimum percentage</i>
Generation	79	100	21
Sex of connecting relative	67	70	3
Blood or marriage	64	100	36
Lineal or collateral	49	56	7
Sex of relative	46	90	44
Age in generation	39	39	0
Sex of speaker	37	46	9

### *Generation*

Kawaiisu (see table 15) appears as the only Californian group consistently applying its kinship terms to one generation only. This is hardly a reality, however, for Kawaiisu employs but single stems for grandparents and reciprocals and for uncle-aunts and reciprocals. The term for the junior generation, however, is differentiated by a diminutive suffix, hence justifying the assertion that Kawaiisu does rigidly delimit its terms to a single generation. Throughout the analyses of the fifty-eight kinship terminologies all such slight differences between terms have been treated as constituting distinct terms.

Two factors have been particularly potent in bringing about the high degree of variability in the category of generation. The first is the use of self-reciprocal terms between individuals of different generations, chiefly grandparents and grandchildren, parents- and children-in-law, and uncle-aunts and nephew-nieces. The second factor is the placing of father's sister, cross-cousins, and all dependent relatives in generations below and above their normal generations. As already indicated (p. 247), this custom may be the result of marriage to the wife's brother's daughter. Of the two factors, the second is the more powerful in the reduction of the category of generation, as it reacts on a large number of remote yet connected and dependent terms, both of consanguinity and affinity. This greater potency for reduction is plainly visible in the percentages of the central Californian groups with the second factor present, which range chiefly between 20 and 40 per cent, as compared to the peripheral groups with the first factor present, which range chiefly between 60 and 80 per cent. If the tribes with more than 50 per cent and those with less than 50 per cent are plotted on the map with two colors, the usual contrast between the Central California Valley area and the remainder of the state, particularly the peripheral Mountain area, will appear.

Viewing the matter of generation from a linguistic standpoint, Penutian, Hokan, and Yukian prove to be exceedingly variable. All are in large part central Californian. The same variability is apparent in each of the Penutian stocks except Maidu. Athabascan, Algonkin, and Shoshonean are far less variable than the other three families. The following list presents the ranges of variation in percentages for the larger linguistic groups.

Penutian.....	21-90 (70)	Yukian.....	27-83 (57)
Yokuts.....	21-75 (55)	Athabaskan.....	58-73 (15)
Miwok.....	24-72 (49)	Northern Hokan.....	63-74 (12)
Wintun.....	24-82 (59)	Algonkin.....	76-88 (13)
Maidu.....	70-90 (21)	Shoshonean.....	72-100' (29)
Hokan.....	24-97 (74)	Yuman.....	78-97 (20)
Pomo.....	24-75 (52)		

### *Sex of Connecting Relative*

Sex of the connecting relative has a very spotted distribution (see table 15). The influences which cause this are not apparent to the writer. The fluctuations occur equally within culture areas and within linguistic families. Thus Athabaskan ranges from 57 (Hupa) to 3 (Kato), and the Northwestern culture area from 57 (Hupa) to 9 (Yurok). There is a difference of 22 between two of the dialects of Mono. The Yuman tribes range from 70 (Cocopa) to 42 (Northern Diegueño). This variability in the expression of the category is more or less prevalent throughout the state. Only among the Pomo and Yukian groups (Coast Yuki excepted) do we find a fair degree of homogeneity, the percentages ranging from 41 to 50. The groups which give more than 80 per cent expression to this category are extreme northern and southern in distribution. Groups which give less than 50 per cent expression are largely north central, while those which express the category in 50 to 80 per cent of their terms are scattered the length and breadth of the state, but are found in greatest force in central and southern California.

Of the major linguistic groups, Athabaskan is the most variable, Penutian and Hokan next, Algonkin and Shoshonean the least. The following list presents the ranges of variation in percentages for the various linguistic groups.

Athabaskan.....	3-57 (55)	Hokan.....	30-70 (41)
Algonkin.....	9-36 (28)	Northern Hokan.....	30-54 (25)
Penutian.....	7-48 (42)	Pomo.....	41-51 (11)
Wintun.....	7-21 (15)	Yuman.....	42-70 (29)
Miwok.....	29-48 (20)	Yukian.....	20-55 (36)
Yokuts.....	31-48 (18)	Shoshonean.....	38-65 (28)
Maidu.....	39-45 ( 7)		

### *Blood or Marriage*

Blood or marriage is the next category in degree of variability (see table 15). Karok alone gives total expression to the principle of distinguishing between relatives by blood and by marriage. Neigh-

boring Yurok observes this principle in only 65 per cent of its terms. Yuman ranges from 98 (Kamia) to 56 (Northern Diegueño). Even within a single language notable variations are found; thus Northwestern Maidu of the plains differentiates between blood and marriage in 73 per cent of its terms, Northwestern Maidu of the mountains in only 38 per cent. The distribution of percentages is such as to militate in considerable measure against any general explanation based solely on language or diffusion or both. Luiseño and Northern Diegueño, both with 56 per cent, probably owe their similarity to diffusive interaction. But the Maidu case cited above is entirely contrary to what might be expected from community of language and contiguity of territory.

As in the preceding category, sex of the connecting relative, so in this category Athabascan proves to be the most variable family. Then follow in order Hokan, Shoshonean, Penutian, Yukian, and Algonkin. Within the Penutian family, Maidu, usually the least variable member, is here the most variable. The following list gives the range in percentages for each stock.

Athabascan.....	44- 93 (50)	Penutian.....	38-76 (39)
Algonkin.....	65- 79 (15)	Yokuts.....	69-76 ( 8)
Hokan.....	55-100 (46)	Miwok.....	59-76 (18)
Northern Hokan.....	83-100 (18)	Wintun.....	44-62 (19)
Pomo.....	55- 67 (13)	Maidu.....	38-73 (36)
Yuman.....	56- 98 (43)	Yukian.....	43-74 (32)
Shoshonean.....	36- 77 (42)		

#### *Lineal or Collateral*

Western Mono presents the minimum (7 per cent) of discrimination between lineal and collateral relatives, Yuma and Lutuami the maximum (56). Of the fifty-eight tribes considered, forty-two, or nearly three-quarters, express the difference between lineal and collateral relatives in only 28 per cent or less of their terms. The groups (see table 15) expressing the difference in more than 28 per cent of their terms are largely outside of the central California Valley area. Groups with percentages of 22 or less lie chiefly in the central California Valley area. Groups with percentages ranging from 23 to 40 are largely peripheral, southern, and northern. The five groups with percentages above 40 are extreme southern and northern.

In distinguishing lineal from collateral relatives Hokan is the most variable linguistic family, as the accompanying list will show. Then in order come Penutian, Shoshonean, Yukian, Athabascan, and Algonkin, the last with a variation of but 2.



Hokan.....	13-56 (44)	Maidu.....	18-29 (12)
Yuman.....	23-56 (34)	Miwok.....	14-18 ( 5)
Northern Hokan.....	19-37 (19)	Shoshonean.....	7-33 (27)
Pomo.....	13-28 (16)	Yukian.....	17-29 (13)
Penutian.....	14-47 (34)	Athabascan.....	22-31 (10)
Wintun.....	16-47 (32)	Algonkin.....	44-45 ( 2)
Yokuts.....	14-30 (17)		

### *Sex of Relative*

No Californian system indicates sex of relative in all of its terms. The nearest approach to complete expression of this idea is found in Southwestern Pomo, where it reaches 90 per cent. On the other hand, the minimum percentage of 44 for this category indicates that it is more frequently expressed than all others, which have minimum percentages ranging from 36 to 0. Only thirteen groups fall below 60 per cent in expressing this category, and they are more or less scattered and peripheral: Shasta, Achomawi, and Lutuami in northeastern California; Northeastern and Western Mono, Serrano, Desert Ca-huilla, Cupeño, and Luiseño, among Shoshonean groups, together with the nearby Kamia and Northern Diegueño; Southeastern and South-western Wintun in central California. The solid blocks formed by the southern and northern groups indicate the action of linguistic or diffusive factors, in all likelihood. On the whole the Californian tendency may be characterized as toward full expression of the sex of the relative designated. The minimal expression is characteristic in large measure of groups employing self-reciprocal terms especially for grandparents, and in considerable measure is due to the use of such terms, as those for the junior generation usually do not express sex of relative.

Hokan is the most variable linguistic family in expressing the sex of the relative designated. Penutian holds second place in point of variability; then follow Shoshonean, Athabascan, Algonkin, and Yukian, the last being exceedingly stable. The variations for each stock appear in the following list.

Hokan.....	44-90 (57)	Miwok.....	64-80 (17)
Northern Hokan.....	44-76 (33)	Maidu.....	63-71 ( 9)
Yuman.....	56-81 (26)	Shoshonean.....	47-70 (24)
Pomo.....	69-90 (22)	Athabascan.....	79-88 (10)
Penutian.....	50-88 (39)	Algonkin.....	73-79 ( 7)
Wintun.....	50-88 (39)	Yukian.....	76-81 ( 6)
Yokuts.....	69-85 (17)		

### *Age in Generation*

Age in generation, like sex of speaker, falls below 50 per cent in its maximal expressions, which are 39 in Wappo, 37 in Kawaiisu. It finds its place among all groups (except Wiyot) in the sibling class and is further frequently expressed in the uncle class. Except for Wappo and Kawaiisu, this category nowhere rises above 29 per cent. Distinction of age in generation is *par excellence* a Yukian trait, in spite of Coast Yuki appearing as an exception. In table 15 the lower figures for this category are with groups which employ the category for the sibling class only. The higher figures are the result of the superadded discrimination of uncle-aunts and nephew-nieces as to age in generation.

In the matter of age in generation, Yukian comes to the fore as the most variable linguistic family, while Athabascan is relegated to the foot of the list. Hokan and Penutian occupy middle places in the series of six major linguistic groups.

Yukian.....	10-39 (30)	Wintun.....	12-24 (13)
Shoshonean.....	10-37 (28)	Yokuts.....	11-21 (11)
Hokan.....	9-28 (20)	Miwok.....	15-21 ( 7)
Yuman.....	19-28 (10)	Maidu.....	13-18 ( 6)
Pomo.....	14-18 ( 5)	Algonkin.....	0-12 (12)
Northern Hokan.....	9-14 ( 6)	Athabascan.....	9-12 ( 4)
Penutian.....	11-24 (14)		

### *Sex of Speaker*

Sex of the speaker is in a measure the most constantly (least variably) expressed of all of the categories, as its range of variation is the lowest, 37. It is less frequently expressed by the tribes of central California and more frequently by those of northern and southern California.

Sex of speaker, the least frequently expressed of the seven categories, finds its maximum variation in the Hokan languages. Athabascan and Penutian together hold second place for variability. Then follow Shoshonean, Yukian, and Algonkin. The following list shows the range of variation for each linguistic family.

Hokan.....	17-46 (30)	Maidu.....	13-21 ( 9)
Yuman.....	26-46 (21)	Wintun.....	9-16 ( 8)
Northern Hokan.....	17-33 (17)	Yokuts.....	18-22 ( 5)
Pomo.....	17-30 (14)	Shoshonean.....	21-37 (17)
Athabascan.....	25-42 (18)	Yukian.....	12-26 (15)
Penutian.....	9-26 (18)	Algonkin.....	15-24 (10)
Miwok.....	10-26 (17)		

## CONCEPTUAL RECIPROCITY

“What may be termed conceptual reciprocity is an exact accord in range of inverted meaning of the terms for two relationships. Complete conceptual reciprocity exists only when all persons called by one term call all those who thus name them, and no others, by the reciprocal term. It is immaterial whether the second term is identical with, similar to, or entirely different from the first.”<sup>121</sup>

Strictly speaking, the phenomena which I am treating as conceptual reciprocity do not accord exactly with Dr. Kroeber's above quoted definition. I have treated as conceptually reciprocal all terms whose inverted meaning is embraced by a single term. All terms whose inverted meanings are embraced by two or more terms I have treated as not conceptually reciprocal, even though the two or more terms be only modifications of a single stem. Examples will make the matter clear. Huchnom employs terms for father, mother, child. Father and mother are each treated by me as conceptually reciprocal: their inverted meanings are embraced in one term. Child is treated as not conceptually reciprocal: its inverted meaning is expressed in two terms, not in a single term. In cases like that of Wappo, in which the term for daughter is simply the term for son plus a feminine suffix, I have treated the terms as two distinct words.

Broadly speaking, two terms for offspring are conceptually reciprocal to two terms for parents, but for analytical purposes, and especially where diverse systems are concerned, it is better to adopt the rigid criterion which I here employ.

Had I adhered strictly to the letter of Dr. Kroeber's definition such cases as those of the Huchnom terms for father and mother would have had to be omitted, for the term child is not in “exact accord in range of inverted meaning” with either father or mother, but only with parent. If I had adopted this narrow view, the percentage of conceptual reciprocity for each of the groups considered would be considerably reduced. It would mean admitting as conceptually reciprocal only cases like mother's brother and man's sister's child. The case of mother's brother, man's sister's son, man's sister's daughter would have had to be ruled out. What I have actually done in this case is to count mother's brother as not conceptually reciprocal, as it takes two terms to express its range of inverted meaning. Man's sister's son and man's sister's daughter I have treated as conceptually

<sup>121</sup> A. L. Kroeber, *Zuñi Kin and Clan*, Anthr. Papers, Am. Mus. Nat. Hist., XVIII, 79, 1917.

reciprocal, as it takes but a single term in each case to express the range of inverted meaning: man's mother's brother, woman's mother's brother. That man's mother's brother equals woman's mother's brother in no way affects the conceptual reciprocity, and for my purposes is disregarded.

Let us now consider the results of the analysis of sixty-six Californian kinship systems, which are presented in the following list. The figures indicate the percentage of conceptually reciprocal terms in each system. Discrimination as to sex in some languages and not in others is in part responsible for the percentage differences which appear between many related languages, as those of the Yuman, Pomo, Wintun, and Yukian groups.

Tolowa.....	49	Cocopa.....	58
Hupa.....	49	Southern Diegueño.....	73
Whilkut.....	49	Northern Diegueño.....	79
Lassik.....	62	Paleuyami.....	40
Wailaki.....	71	Yauelmani.....	54
Sinkyone.....	56	Yaudanchi.....	64
Kato.....	64	Tachi.....	49
Yurok.....	35	Gashowu.....	43
Wiyot.....	44	Chukchansi.....	52
Karok.....	40	Southern Miwok (Pohonichi).....	50
Shasta.....	69	Southern Miwok (Yosemite).....	43
Achomawi.....	65	Central Miwok (Groveland).....	53
Northern Yana.....	65	Central Miwok (Tuo'umne).....	46
Yahi.....	66	Northern Miwok.....	38
Lutuami.....	86	Plains Miwok.....	68
Northwestern Maidu of the plains	60	Lake Miwok.....	67
Northwestern Maidu of the moun-		Coast Miwok.....	65
tains.....	59	Southeastern Wintun.....	74
Northeastern Maidu.....	57	Southwestern Wintun.....	74
Southern Maidu.....	59	Central Wintun.....	43
Washo.....	62	Northwestern Wintun of Trinity	
Northern Paiute.....	73	county.....	44
Northeastern Mono.....	73	Northern Wintun of Shasta county	21
Southeastern Mono.....	63	Northeastern Wintun.....	23
Western Mono.....	67	Southeastern Pomo.....	46
Kawaiisu.....	60	Eastern Pomo.....	58
Tübatulabal.....	77	Central Pomo.....	31
Serrano.....	86	Northern Pomo.....	45
Desert Cahuilla.....	84	Southwestern Pomo.....	31
Cupeño.....	80	Southern Pomo.....	40
Luißeño.....	78	Wappo.....	29
Yuma.....	89	Huchnom.....	60
Mohave.....	92	Yuki.....	47
Kamia.....	71	Coast Yuki.....	61

Groups with percentages above 70 are largely peripheral. All southern California falls in this category. The two southern Wintun

groups and Wailaki are the only groups west of the Sierra Nevada which have percentages above 70. Tribes with percentages between 20 and 40 are largely confined to the northern half of California (Paleuyami is the only exception). In distribution they are scattered; three Pomo groups and the Wappo, however, form a notably compact geographic unit, as do the Yurok and Karok. More than 50 per cent of the Californian tribes considered are median in their expression of conceptual reciprocity, ranging from 41 per cent to 70 per cent, a state of affairs, however, which may be the result of the operation of the law of chance. Geographically the groups belonging in this category stretch from the Tehachapi mountains in the south to the Oregon boundary in the north. Several lie on the east side of the Sierra Nevada and are distinctly peripheral. Their percentages, however, are near the upper limit for this arbitrary medial group. On the whole, then, conceptual reciprocity aligns itself with other kinship phenomena and exhibits the same longitudinal kernel (Central California Valley area) and enclosing shell or periphery, which we have already so frequently noted.

The following list presents the extremes and the range of variation for each linguistic group. The maximum range is found in Wintun—54 units. All other Penutian groups fall short of the Wintun extremes: Miwok has a range of 31, Yokuts 25, and Maidu 4, the last exhibiting a remarkable homogeneity. With the exception of monotypic Lutuami, Yuman and Shoshonean have the highest minima and maxima, though their ranges are normal. Clearly Yuman and Shoshonean are the two families most addicted to the expression of conceptual reciprocity.

Wintun.....	21-74; range 54	Northern Hokan	
Yukian.....	29-61; range 33	(including Washo)....	40-69; range 30
Pomo.....	31-58; range 28	Athabascan.....	49-71; range 23
Algonkin.....	35-44; range 10	Maidu.....	57-60; range 4
Miwok.....	38-68; range 31	Yuman.....	58-92; range 35
Yokuts.....	40-64; range 25	Shoshonean.....	60-86; range 27
		Lutuami.....	86

#### SELF-RECIPROCITY

This phenomenon has been considered for the grandparent and uncle classes,<sup>122</sup> the two groups of relatives in which it frequently manifests itself on an extensive scale. All cases of self-reciprocity have been included in conceptual reciprocity in measuring the extent of the latter.

<sup>122</sup> See pp. 130 and 154.

Outside of the grandparent and uncle classes, self-reciprocity is of frequent occurrence. The terms for child's parent-in-law, wife's sister's husband, husband's brother's wife, and co-wife are usually of this type. Not infrequently certain of the two-step sibling-in-law terms are self-reciprocal, as are supernumerary sibling and cousin terms. Now and then parent-in-law and child-in-law terms are self-reciprocal.

Since we have considered the principal cases of self-reciprocity in the uncle and grandparent classes and since all cases are covered by conceptual reciprocity, it scarcely seems advantageous to pursue the matter in further detail.

#### DESCRIPTIVE TERMS

The proper elucidation of this subject lies beyond the abilities of the writer, who lacks the requisite linguistic knowledge. There are certain obvious cases of descriptive terms occurring among the various Plateau and Southern California Shoshonean tribes. Among the latter descriptive terms are notable in the designations of relatives by marriage following the birth of a child, which I have called post-issue terms. Recently Miss Grace Melissa Dangberg has found similar post-issue terms among the Washo.<sup>123</sup> It seems quite clear that descriptive terms in general have a wide vogue east of the Sierra Nevada<sup>124</sup> and in southern California.

Descriptive terms are the result of linguistic and psychic factors rather than of social factors. Nevertheless, in the special case of descriptive post-issue terms it cannot be denied that childbirth is a new bond between relatives-in-law. To all appearances the native recognizes this bond by the use of special terms. In this connection data on the attitude towards relatives-in-law before and after the appearance of offspring are desirable.

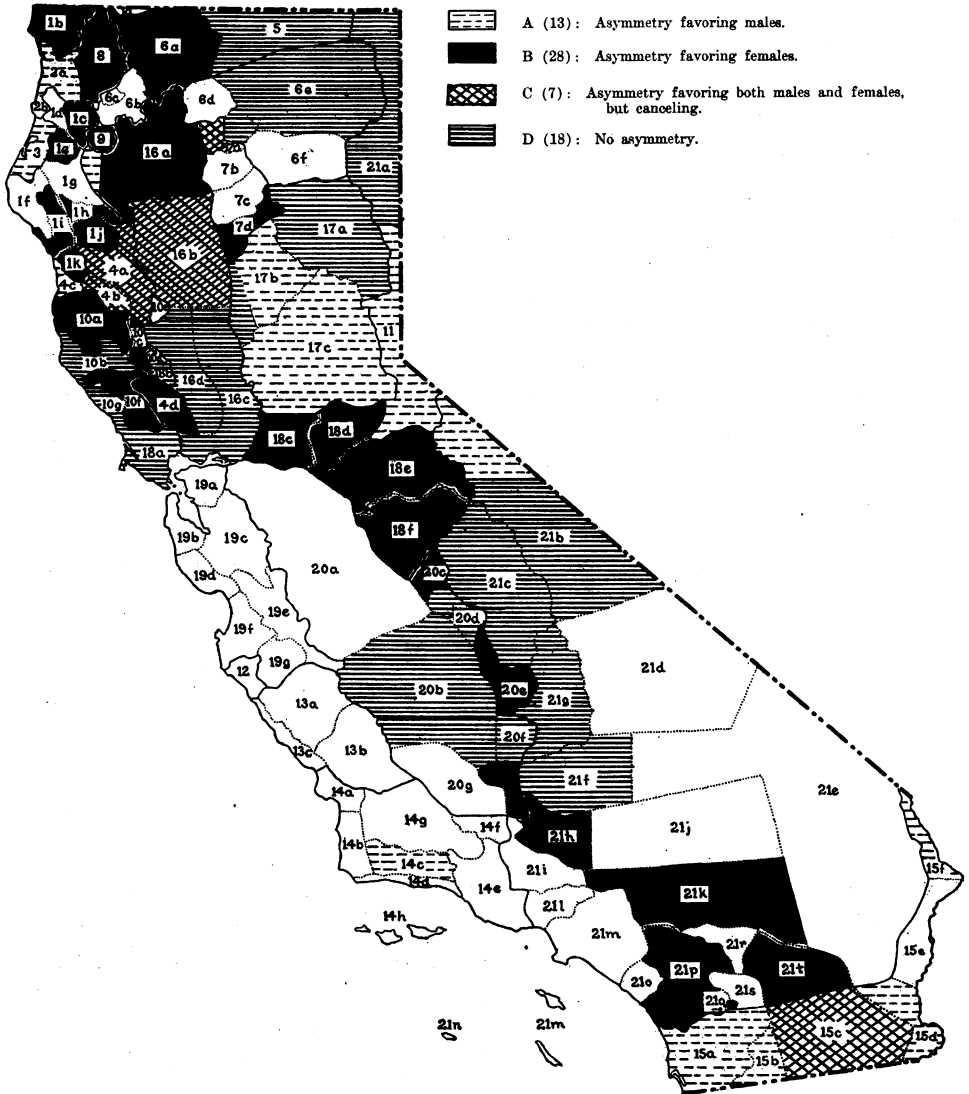
<sup>123</sup> "Among the Washo a term of relationship designating a man's or a woman's sister's husband, a woman's brother's wife, and a man's or a woman's son-in-law is replaced after the person in question becomes a parent by a term designating him or her as the parent of nieces and nephews or of grandchildren, as the case may be."

<sup>124</sup> Dr. Edward Sapir writes me: "Kroeber has pointed out that several Washo kinship terms are descriptive. Let me add one that is not so evident. *-cè muk* 'woman's brother's or sister's child' is undoubtedly compounded (in contracted form) of *-ca-* (cf. reduplicated *-ca'ca* 'mother's sister'; *a* and *e* often appear related in Washo) and *-māgu* 'man's sister's child,' i.e., 'maternal aunt's nephew or niece.'"

## SEX ASYMMETRY AND DESCENT

Map 29

There is considerable asymmetry between reciprocal generations, as when a single term is used for offspring and two for parents. This



Map 29.—Asymmetry in sex designation.

sort of asymmetry I am not considering here. I am devoting my attention to the asymmetry in sex designations or implications with a

view to determining, if possible, if there is any correlation with the reckoning of descent in either the male or the female line. It seems a priori likely that, where the female line is weighted, that is where the female terms outnumber the corresponding male terms, there must be a leaning toward matrilinear institutions. At least it will be permissible to regard such weighted lines as a matrilinear trait even if there are no other matrilinear traits in the social complex.

The asymmetry, or weighting of one sex, may occur in (1) the sex of the relative, in (2) the sex of the connecting relative, or in (3) the sex of the speaker. Examples of weighting in these three cases are: (1) son versus man's daughter and woman's daughter, (2) son's child versus man's daughter's child and woman's daughter's child, (3) man's child versus woman's son and woman's daughter. In table 17 no distinction is made as to the category in which the asymmetry occurs. All cases are treated alike and merely the amount of asymmetry shown.

The double line of totals at the right of the table shows at a glance whether the total asymmetry of a given system favors the male line or the female line. The difference between the two totals at the bottom of each column shows the amount of asymmetry in the various classes of relatives. The asymmetry is greatest (difference of 12) in grand-child designations.

Of the sixty-seven groups considered, twenty-five are neutral, either having no asymmetry or asymmetry favoring both sexes which cancels. Fourteen groups, including Cocopa, have asymmetry favoring males, twenty-eight groups asymmetry favoring females. Map 29 shows the distribution of these various categories.

A review of the groups with weighted lines will now be made in order to note the correlations, or lack of correlations, with peculiarities of social organization. The Yuman groups, except neutralized Kamia, give preponderance to males, which is in consonance with their patrilinear clans.<sup>125</sup> Just the reverse is true for the Southern California Shoshoneans, for female terms preponderate, yet the clans and moieties of the tribes concerned reckon descent patrilinearly.

Passing northward to the neutral groups of south central California, we find that certain of these (Kawaiisu, Tübatulabal, Paleuyami, Eastern Mono) are without patrilinear clans or moieties. Three

<sup>125</sup> For notes on the social organization of certain central and southern Californian groups see *Clans and Moieties in Southern California*, present series, xiv, 155-219, 1918.



TABLE 17  
ASYMMETRY IN SEX DESIGNATION SHOWN BY ACTUAL NUMBER OF TERMS

	Parents		Off- spring		Grand- parents		Grand- children		Siblings		Uncle- aunts		Nephew- nieces		Cross- cousins		Step- children		Spouses' nieces		Parents- in-law		Children- in-law		Siblings- in-law		Totals	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Tolowa.....			1	2																							0	4
Hupa.....			1	2			1	2																			4	8
Whilkut.....			1	2			1	2																			4	8
Lasik.....			1	2			1	2																			4	8
Walaki.....			1	2			1	2																			4	8
Sinkyone.....			1	2			1	2																			4	8
Karok.....			1	2			1	2																			4	8
Yurok.....			1	2			1	2																			4	8
Wiyot.....			1	0			1	0																			2	1
Kashaya.....																												
Chimariko.....																												
Shasta.....																												
Northern Yana.....																												
Yahi.....																												
Northern Maidu (mta.).....																												
Southern Maidu.....																												
Wasio.....																												
Northeastern Mono.....																												
Kitanemuk.....																												
Serrano.....			1	2			1	2																			2	3
Desert Cahuilla.....			1	2			1	2																			2	3
Cupeno.....			2	1			1	2																			3	2
Luiseno.....			2	1			1	2																			3	2
Yuma.....			2	1			1	2																			3	2
Mohave.....			2	1			1	2																			3	2
Kamia.....			2	1			1	2																			3	2
Cocopa.....			2	1			1	2																			3	2
Southern Diegueño.....			2	1			1	2																			3	2
Northern Diegueño.....			2	1			1	2																			3	2
Ynezito.....																												
Yaudelmani.....																												
Yaudanachi.....																												
Chukchansi.....																												
Southern Miwok.....																												
Central Miwok.....																												
Northern Miwok.....																												
Plains Miwok.....																												
Central Wintun.....																												
Northwestern Wintun (Trinity).....																												
Northwestern Wintun (Shasta).....																												
Northeastern Pomo.....																												
Southeastern Pomo.....																												
Eastern Pomo.....																												
Northern Pomo.....																												
Southern Pomo.....																												
Wappo.....																												
Hucknom.....																												
Yuki.....																												
Coast Yuki.....																												
Totals.....	6	3	24	25	11	22	21	33	6	5	15	24	2	4	4	3	6	6	1	2	4	2	3	7	28	28	5	4

neutral groups (Western Mono, Tachi, and Gashowu), however, have patrilinear moieties. Conversely, the moietyless Yauelmani and Yaudanchi weight the female line. More anomalous still are the Chukchansi, Southern, Central, and Northern Miwok, which have patrilinear moieties but weight the female line just as do the Southern California Shoshoneans. There is yet one possible case of correlation, perhaps on a par with that among the Yuman groups. This is among the Southern Pomo and Wappo, who have matrilinear cross-cousinship. Here we find also a weighting of the female line.

However, the case just cited, together with that of the Yuman tribes, offers but a sorry argument for correlation between sex asymmetry or weighting and other social factors. In fact the number of anomalous cases make it exceedingly hazardous to argue from one matrilinear trait to another or from one patrilinear trait to another. Clearly we must treat each trait as a unit and not be surprised to find matrilinear and patrilinear traits side by side in one and the same tribe.

Why female terms should preponderate over male terms in many tribes which exhibit marked patrilinear traits is not clear to me. An examination of the actual instances seems to throw no light on the situation.

#### BIFURCATION

Two classes of relatives lend themselves admirably to the manifestation of bifurcation, or forking into lines reckoned from the two parents, namely, the grandparent and uncle classes. The reciprocal grandchild and nephew classes also exhibit bifurcation in a high degree, but the issue is clouded by the frequent cognizance given the sex of the speaker. For our purposes, therefore, the senior generations are the better.

Yurok is the only system in which there is no bifurcation in the grandparent, grandchild, uncle, or nephew classes. Moreover, it is the only system in which the uncle-aunts are not bifurcated at least in part. Chimariko, Ynezeño, and Coast Yuki partially bifurcate uncle-aunts. All other Californian systems from which data are forthcoming bifurcate. In many, however, there is a weighting of one line or the other, a matter which has already been discussed under Sex Asymmetry and Descent. Equal bifurcation or non-bifurcation is equivocal so far as the problem of descent is concerned. Equal bifurcation, however, is a necessary preliminary to the weighting, which is

perhaps to be regarded as a manifestation of a definite reckoning of descent. Without bifurcation the basis for manifesting descent is absent.

In the grandparent class, non-bifurcation is much more frequent than in the uncle class; in fact, in central California, it is well-nigh the rule. Reference to map 2 showing the various methods of denoting grandparents will make clear the groups which bifurcate, those which do not, and those which compromise between the two extremes.

In California, the evidence seems to indicate that there is no fundamental connection between moieties on the one hand and bifurcation on the other. To be sure, all groups which have moieties bifurcate the uncle class, but many fail to bifurcate the grandparent class. Thus, in some tribes with moieties, paternal and maternal grandparents are called by a single term, although they are of opposite moieties. The same is true of grandchildren. The following list presents the situation so far as the groups with moieties are concerned.

Western Mono.....	Bifurcated	Gashowu.....	Not bifurcated
Serrano .....	Bifurcated	Chukchansi.....	Not bifurcated
Desert Cahuilla .....	Bifurcated	Southern Miwok.....	Not bifurcated
Cupeño.....	Bifurcated	Central Miwok.....	Not bifurcated
Tachi.....	Not bifurcated	Northern Miwok.....	Half bifurcated

All groups with clans, including the Western Mono with their moiety subdivisions, bifurcate both the uncle and grandparent classes.<sup>126</sup> This is no proof, however, of an intrinsic connection, for a whole host of groups without definite organization also bifurcate.

#### CULTURE CENTERS AND KINSHIP

In his "California Culture Provinces"<sup>127</sup> Dr. A. L. Kroeber published a map showing four cultural centers in California, among the Yurok, the Southern Wintun, the Gabrielino, and the Mohave, respectively.

A perusal of the list of numbers on page 194 showing the tribal degree of specialization shows that it conforms rather closely to Dr. Kroeber's findings in regard to general culture. To be sure, in north-western California the Wiyot are more specialized than the Yurok, but this merely shifts the specialization from the one Algonkin group to the other. In central California the Southern Miwok appear as slightly more specialized than the Southern Wintun. The difference

<sup>126</sup> For discussion of moieties and clans see *Clans and Moieties in Southern California*, present series, xiv, 155-219, 1918.

<sup>127</sup> Present series, xvii, 167, 1920.

is so slight that Dr. Kroeber's estimate for Southern Wintun culture may also be taken for the kinship system, which is unique for its small number of terms. The Gabrielino are not represented in the list on page 194, but their neighbors, the Serrano, are, and, furthermore, the Serrano appear as the most specialized group in southern California, outside of the Colorado River area, again making it probable that Dr. Kroeber's assignment of the culture center to the Gabrielino may also have applied to kinship. Turning now to the Colorado river tribes, we find figures for the Mohave lacking, but their kinsmen, the Yuma, exhibit the highest degree of kinship specialization in California.

It is clear, then, that culture centers and kinship centers are approximately identical. This virtual identity seems open to only one interpretation, namely, that kinship and other phases of culture are intimately connected.

#### BRIEF SUMMARY OF CONCLUSIONS

Part I presents the individual kinship systems. Part II analyzes and discusses them. It is with part II that this summary is concerned.

Under the caption, "Types of Classification and Their Distribution" (p. 123), the various ways of designating the principal classes of relatives are discussed and plotted on maps. The various kinship traits are distributed like other cultural traits and make manifest the influences of ethnic contact.

The definition of the various types of classification paves the way for an arithmetical presentation of "Tribal Degree of Specialization" (p. 193). This is followed by a lengthy section (p. 197), also employing numerals, making it very clear that both diffusion and language have played leading parts in the evolution of kinship.

The discussion of the "Etymology of Kinship Terms" is an attempt to isolate the archaic stems of the several major linguistic groups. It is perhaps correct to regard these stems as parts of archaic nuclei about which the present systems have been erected. Twenty-seven stems common to two or more of the major linguistic groups are presented. These are possibly to be interpreted as indication of a kinship stratum common to all of the Californians.

Under "Society" are discussed certain forms of marriage, exogamy, descent, and mother-in-law taboo, and their effect upon kinship designations. The conclusion from the sections on "Society" is that Dr. Rivers' position that "we have here a case in which the principle of determinism applies with a rigour and definiteness equal to that of any of the exact sciences"<sup>128</sup> becomes untenable; for it is found that the same factor operates with varying effect or no effect in different systems.

The section on "Psychology" presents, measures, and shows the distribution of various of the less tangible phases of kinship such as the "Underlying Categories," made so prominent by Dr. Kroeber,<sup>129</sup> Reciprocity, Descriptive Terms, Sex Asymmetry, and Bifurcation. They prove to have distributions which seem to indicate that contact and diffusion have here also played a part as in other kinship and cultural phenomena.

Centers of kinship specialization and culture centers largely coincide, emphasizing the fact that, although we are dealing with language in kinship terms, we are also dealing with cultural phenomena in the strict sense of the words.

### CONCLUDING REMARKS

Although this paper is unusually detailed and presents data from a large number of tribes occupying a comparatively small area, it nevertheless falls far short of exhaustiveness and leaves much undone. Now that the descriptive and distributional sides of kinship in California are here rather fully covered, perhaps the most crying need is for intensive linguistic study, not for the sake of linguistics alone, but largely to determine the direction of kinship development. The linguistic section which I have written probably does little more than scratch the surface.

The sections on "Society" clearly reveal the inadequacy of present data. Fuller data may clear up many moot points of kinship and contribute to our knowledge of the mechanism as well as the direction of kinship development.

<sup>128</sup> W. H. R. Rivers, *Kinship and Social Organization* (London, Constable & Co., Ltd., 1914), 93.

<sup>129</sup> A. L. Kroeber, *Classificatory Systems of Relationship*, *Jour. Royal Anthr. Inst.*, xxxix, 78, 1909.

As to the psychology of kinship, the really fundamental questions still remain unanswered, namely, the why and the wherefore of many kinship phenomena. The various tabular analyses and maps presented in the preceding sections on "Psychology" do not answer the questions. They merely present and measure the phenomena as they stand, but are not penetrating enough to reveal our true desiderata—the ultimate origin and reason for existence of the most commonplace terms of kinship in every language.

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